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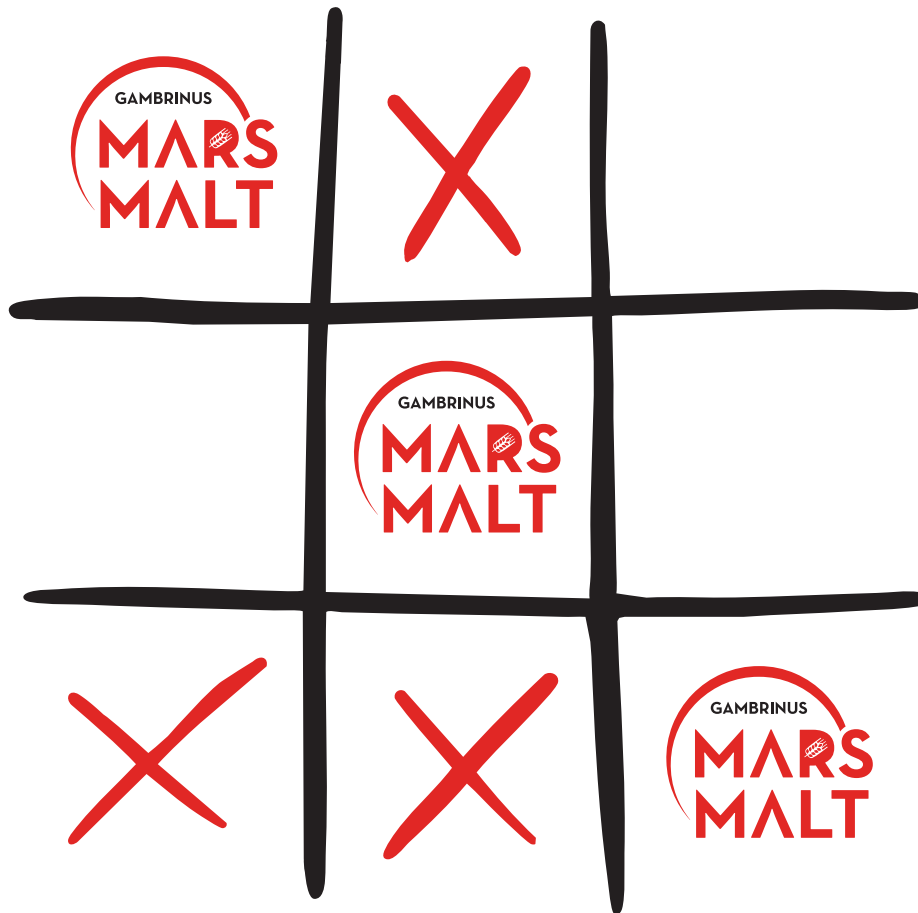
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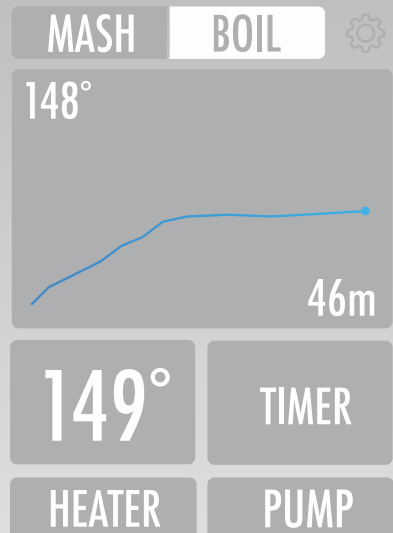


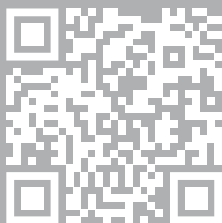
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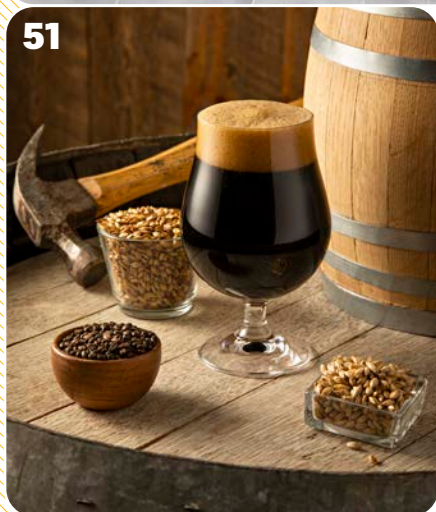
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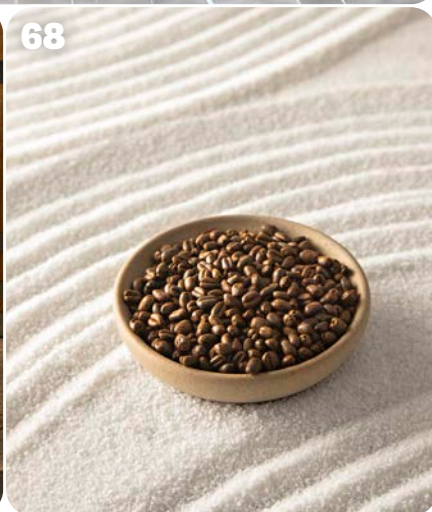
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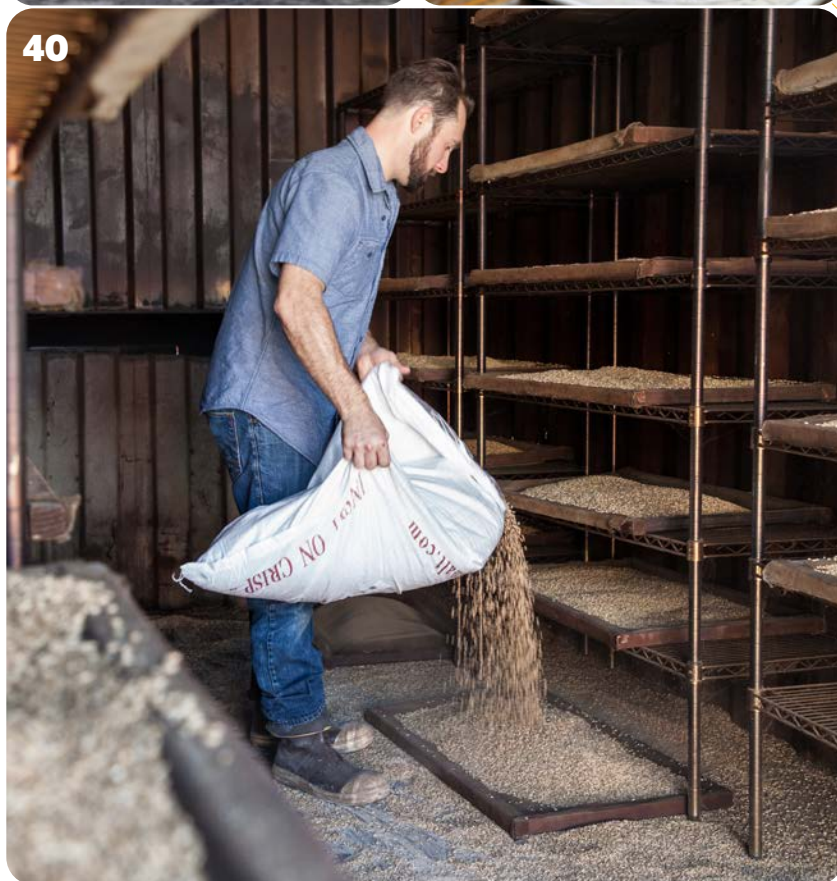
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Lucy Corne is an award-winning beer writer, educator, and Africa's first Advanced Cicerone. She's written two books on South African beer, and numerous international beer publications have published her work. She cofounded the African Beer Cup with her husband Shawn; they live in Cape Town with their son.



Annie Johnson is an experienced R&D brewer, IT specialist, and national beer judge. Her awards include 2013 American Homebrewer of the Year honors. As an influential voice in American brewing today, her recorded oral history is preserved in the Smithsonian National Museum of American History's Brewing History Initiative.



Randy Mosher has spent most of his career working on creative projects revolving around beer. Author of *Tasting Beer* and four other books, he also teaches, consults on recipes and branding, and is a partner in two Chicago-area breweries: 5 Rabbit Cerveceria and Forbidden Root.



Martin Thibault has authored five books about beer tasting and farmhouse-brewing culture and has traveled all around the world to discover new flavors and old brewing techniques, from Bhutan to Bolivia, Norway to Ethiopia. His writing has won recognition from the North American Guild of Beer Writers, Taste Canada, and the Gourmand World Book Awards.

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DO YOU EVER GET THE FEELING that something is cooler once the mainstream gets tired of it? Things are *always* cooler before they're discovered by the general populace—that dynamic is as old as time—but I've increasingly found things more interesting after they've gone through the commercial wringer and come out the other side.

I find the same here in the world of beer, and in this moment when we're experiencing a broad commercial pullback, it's important to think about how creative currents often move independently of the

more commercial ones. Like many who came of age in the '90s, I got interested in underground music as well as craft beer because it *wasn't* popular, but it offered alternative expressions that felt more contemporary and vibrant. We were part of some sort of special club, searching out cool things in the pre-internet world—throwing a buck or two in the mail for some fanzine from another state that told us all these things about which we'd heard only rumors; riding bikes for miles to the one or two truly cool underground

record stores to sift through the bins of records and cassettes; going to shows of all sorts just because it was something to do, no matter what the genre; and seeking out beer that was unusual, imported, or "micro-brewed," just because it was something different.

Along the way, "different" turned into mainstream cool. Nirvana had hit records, punk rock became mainstream radio fare, emo went from a late '90s underground extension of the hardcore scene to something mainstream and much different in the '00s. EDM graduated from underground events to mainstream festivals, then to the world's most expensive clubs with VIP lounges and bottle service. Craft beer, meanwhile, went from less than a percent of the overall beer market—something you had to dig deep for and seek out—to a mainstream phenomenon and ubiquitous presence.

Now, craft beer is in an interesting place. Some of that big, general interest is cooling off a bit—but rather than see it as the beginning of the end, I'm excited to see what we carry into its next phase. A few brewers might throw in the towel when their dreams of superstardom fade, but ... Here we are, almost four decades from when I bought my first Cure cassette, and they've just released one of their most interesting records to date. More than three decades after watching Nine Inch Nails open up for the Jesus and Mary Chain at a 700-person club, I'm now far more excited by their award-winning soundtrack work and atmospheric compositions than I was with any of their biggest hits. There's deep creative space to be mined after the spotlight dims. And while the biggest pop crowds may move on to something else, true artists can keep a core audience engaged.

What shape will that take with some of the world's most exciting brewers? I don't have a crystal ball and can't say for certain, but I am confident that, creatively speaking, craft beer is in the best hands it has ever been in, and we're here to document future chapters of this 10,000-year-old brewing story. I hope you enjoy this issue's look back and preview of the future. After all, we made it for you.

Jamie
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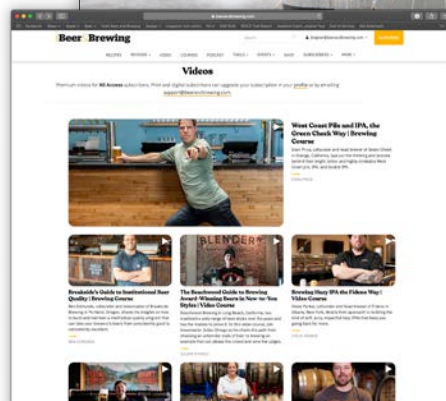
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- » **Brewing Industrial Arts Wrench IPA**
- » **How to Brew Great Stouts**

And more!

Don't Miss These New Classes!



West Coast Pils and IPA, the Green Cheek Way | Brewing Course

Evan Price, cofounder and head brewer of Green Cheek in Orange, California, lays out the thinking and process behind their bright, bitter, and highly drinkable West Coast pils, IPA, and double IPA.

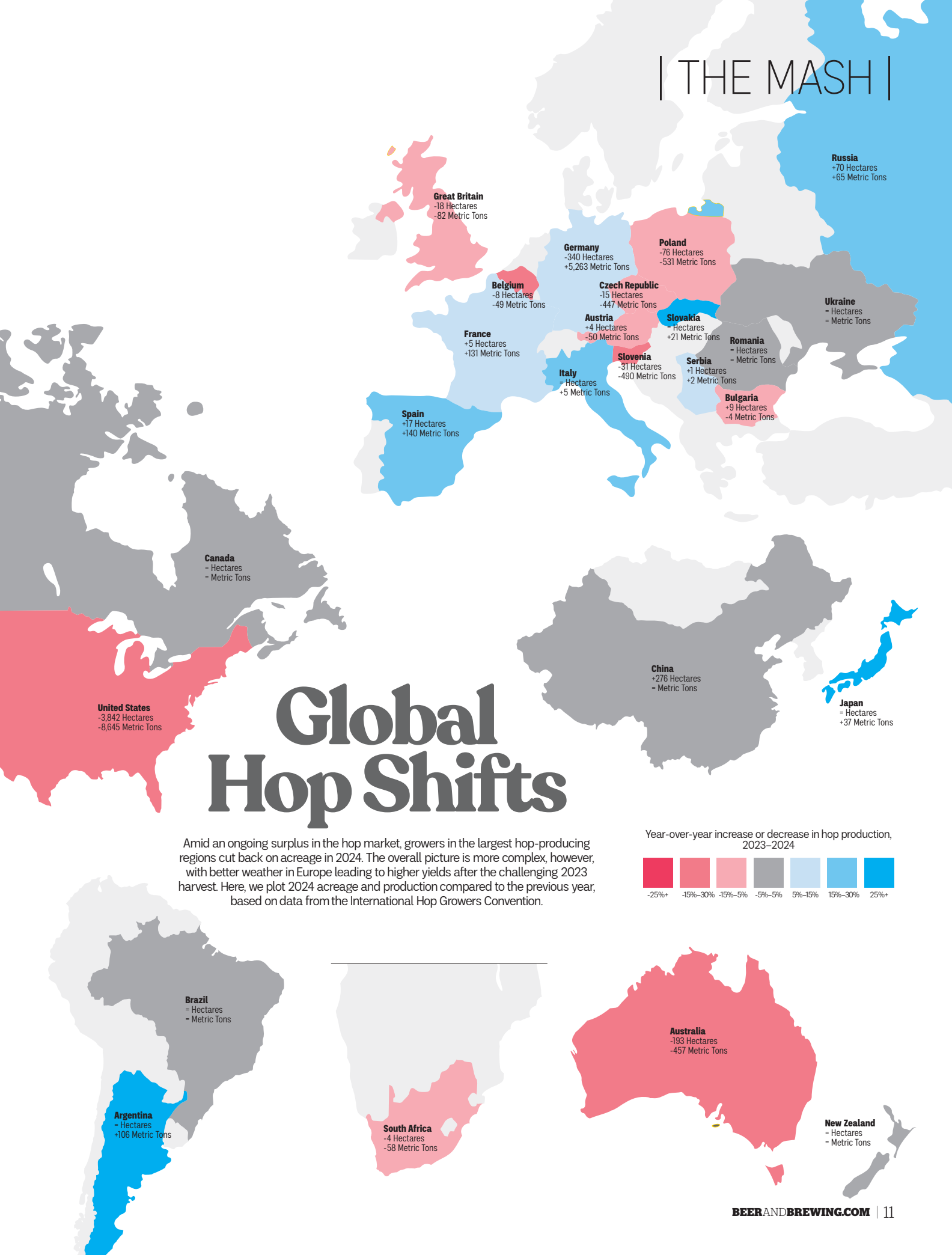


Breakside's Guide to Institutional Beer Quality | Brewing Course

Ben Edmunds, cofounder and brewmaster of Breakside Brewing in Portland, Oregon, shares his insights on how to build and maintain a methodical quality program that can take your brewery's beers from consistently good to consistently excellent.

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Editors' Picks

Strain Gain

Innovation in the fermentation space shows no sign of slowing, as today's yeast suppliers continue to expand the brewing world's access to novel and functional yeast varieties—and delivered in better shape than ever before. Here's a handful of yeast-related developments piquing our interest.

AS THE CRAFT-BREWING WORLD

matures, innovation is cooling off in many corners of the industry. The once-dependable flood of new brewing technology has slowed to a trickle as brewers tighten their capital-expenditure belts. Yet the ingredient side of the brewing world remains a bright light, with rapid innovation answering big questions as they relate to changing consumer preference for nonalcoholic and low-calorie products, tighter niche offerings for aficionados, and tools to extract greater efficiency while brewing at higher quality. Here, we take a look at some of these new yeast strains, delivery methods, yeast-derived flavor products, and more.

Escarment Terps & Elysium escarpmentlabs.com

Plenty of brewers we trust count on Escarpment for researched and rigorous yeasts that are both functional and flavorful. With Terps, they took the classic American ale strain and rapidly evolved it, steering it toward punchier terpene production that's perfect for modern West Coast-style IPA. The lab similarly bred Elysium with a focus on pineapple esters, perfect for tropically tinted IPAs or even fruit beers. But you don't sacrifice at the altar of flavor—Escarment has optimized both yeasts to get the job done, even in challenging production environments.

White Labs & Yeast Bay PurePitch Next Generation whitelabs.com

We've come a long way over the past decade, and you don't have to dig back too

many years into our archive to see White Labs test-tube-style yeast packaging in our photos. Those seem like an antiquity now, as their PurePitch Next Generation packaging consistently delivers more cells into every pitch with healthy yeast that's raring to go. Add in the beautiful collection of Yeast Bay cultures that White Labs now offers, and you have an unbeatable combination for any brewer who wants to explore expressive, clean, or funky brews.

Wyeast Private Culture wyeastlab.com/private-culture-collection

We're suckers for limited-time offers, and the quarterly releases through the Wyeast Private Culture program are great ways to stretch out and explore. The first quarter 2025 offerings are a West Coast IPA strain (1217-PC) with low ester production even at warmer temperatures, and a North American lager strain (2272-PC) that amplifies malt character in pale lagers.

Imperial Gnome & The GOAT imperialyeast.com/yeast-strains/gnome imperialyeast.com/yeast-strains/the-goat

Gnome offers classic Belgian phenolic notes, but balanced, while boosting hop character in pale beers and dropping bright. The GOAT, meanwhile, is aimed squarely at what you think it is—German-style bocks, maibocks, and heartier lagers. Get them while they're in season.

Berkeley NA Strains berkeleyyeast.com/pages/na-strains

They're only available to pro brewers at this point, but the engineered NA Cabana



and NA Classic strains don't ferment maltose and maltotriose (only glucose). Through their fast fermentations, they also produce familiar beery flavors and aromas that will help you forget you're drinking nonalcoholic beer. Cabana ticks the tropical box, while Classic is suited for more of a clean lager feel.

Omega Vossa Nova Thiolized Kveik

omegayeast.com/yeast/kveiks/vossa-nova

Vossa Nova combines the temperature flexibility and haze of Voss kveik with the expressive flavor we've come to enjoy from Omega's thiolized strains—it's a heady mix and perfect for homebrewers and small breweries that like to let fermentations rip.

Lallemand Yops

shop-us.lallemandbrewing.com/brewing-flavors/

Brewers have been using yeast to produce preferred flavors for as long as they've brewed beer, but labs are now using modern tech to hybridize and modify yeast to specifically produce desirable flavor and aroma compounds. The new Yops line from EvodiaBio, available from Lallemand, promises specific hops-like flavor blends—floral, citrus, fruity—but the flavors are products of yeast rather than hops. They're bottled for easy addition to brews, making them an interesting option for NA beer, for example, where microbiological stability is paramount. Look for results of our testing in a few months.

Fermentis Brewer-Friendly Packaging

fermentis.com

It's a small thing, but the new dry yeast packaging from Fermentis, with an integrated spot for punching in a pouring spout, makes brewers' work just a little bit more foolproof on brew days. And per-batch QR codes now provide the ultimate in traceability. Small iterations, but welcome ones.



The Rundown

The latest events, podcasts, and more from the Craft Beer & Brewing Magazine® team

Upcoming Craft Beer & Brewing Events and Dates to Know

Sign up at newsletter.beerandbrewing.com for timely updates.

April 26 The 2025 edition of the **Minnesota Craft Beer Festival** returns to the Minneapolis Convention Center, inviting craft-beer lovers of all kinds for an energetic and welcoming celebration of brewing. Get tickets now, or sign up to pour, at minnesotacraftbeerfestival.com.



Sept 14–17 Launching or acquiring a brewery? The **New Brewery Workshop** will help you build a successful business from the ground up. Learn through panel Q&As, technical tours, hands-on demonstrations, and working sessions. Learn more at breweryworkshop.com.



Nov 2–5 The **Brewer's Retreat** heads south in 2025 for an unforgettable experience at Sierra Nevada in western North Carolina. Don't miss what we colloquially refer to as "fantasy homebrew camp." Tickets are going fast at brewersretreat.com.



The Latest from the Craft Beer & Brewing Podcast

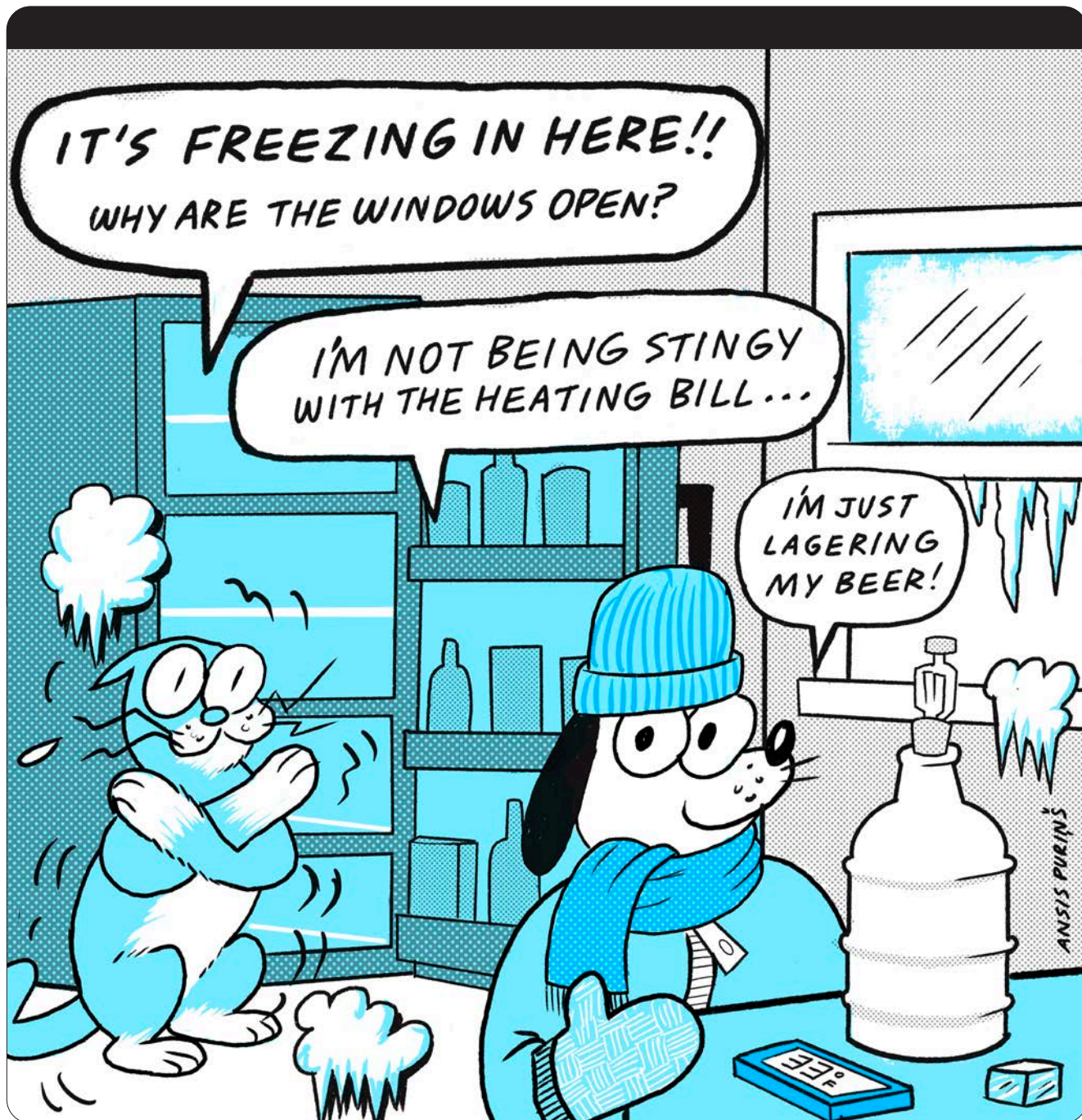


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Whalez, Bro.

By Ansis Puriņš





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Atlanta

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What it is: Located in Little Five Points (L5P), Atlanta's most eclectic commercial district, this two-time James Beard Foundation nominee reopened in May 2024; renovations they expected to take a couple of weeks lasted two years. New owners made a few cosmetic changes by enlarging some booths, recycling old tables and booths into a barrel ceiling, adding a few more paintings of animals drinking beer, and displaying a previously scattered collection of suitcases—the porter, get it?—as art on one wall. But the very long bar leading to dining in the back is as comfortable a place to contemplate beer as when the pub first opened in 2008.

Why it's great: "We missed you so much," a customer tells a bartender on a mid-summer Friday, studying a list of 60 draft choices (but only eight hazy IPAs) from 20 states. There are two cask-beer engines and a vintage menu that runs 15 pages. The food is equally impressive, including the goat-cheese fritters and fish and chips that were favorites before, plus new items such as crispy Hen of Woods mushrooms and sausage made from red wine and garlic. Then there are the small touches, such as ice water served in branded shaker glasses from breweries that may or may not still be in business. —Stan Hieronymus

Hours: 5 p.m.–midnight, Wednesday–Friday; 11 a.m.–midnight, Saturday & Sunday; closed Monday & Tuesday

Address: 1156 Euclid Ave., Atlanta

Web: theporterbeerbar.com

IG: @theporterbeerbar



Pult

Prague

A chapel to pale lager perfectly poured in the center of the Czech capital

What it is: To call Pult a craft-beer bar doesn't do it justice. The first six of its nine Lukr faucets always pour Czech pale lager—and those six always include Budvar, Pilsner Urquell, plus four from lesser-known breweries that deserve more attention. While the remaining three taps feature other styles such as IPA or gose, there are also dozens of bottles in the fridges—Czech craft plus Belgian ales, gueuze, German bocks, and more. A narrow bar with vaulted ceilings, Pult's design combines modern with classic and shiny, space-age draft tech.

Why it's great: Despite nods to variety, this is first and foremost a place to get fresh pale lager poured with perfection. Fans of the classics will be content, while the rotating guests offer the chance to try great lagers you might otherwise never have found in Prague. Run by Ambiente, the same company behind the popular Lokál beer halls, snacks are no afterthought—the charcuterie menu runs from *tartarák* (beef tartare) and smoked sausage to pickled cheese and veggies. The lagers are all the same price—a bit more than \$3 a half-liter—a tad high by local standards but fine for its location, just off Náměstí Republiky. Besides, it feels like great value for the loving pours and attention to detail. —Joe Stange

Hours: 3 p.m.–1 a.m., daily

Address: V Celnici 1031/4, Nové Město, Prague

Web: pult.ambiente.cz/en

IG: @pult_pult_pult



Saccharomyces

Brisbane, Australia

Fiercely independent bar and restaurant

What it is: Saccharomyces Beer Cafe and its attached Saccharomyces Bottle Shop are in the heart of Brisbane, a short walk from the Queensland Museum and the winding Brisbane River. The cafe's 17 rotating taps offer a balance of styles for every palate, while the shop adds its curated selection of beer, wine, and spirits with a focus on local makers. The full menu of hearty food weaves from Belgian-style *boulettes* (meatballs) on baguette—also with a vegan version—to steak frites and smoked pork belly, with more sandwiches, casseroles, schnitzels, and snack platters to share.

Why it's great: On Fish Lane in South Brisbane, its neighborhood is the Arts Precinct and includes galleries, museums, restaurants, and more bars. The unpretentious space offers tables of all sizes, perfect for groups small or large, plus views of the walking street and murals outside. Board games and retro pinball machines offer further diversions. Their two house beers from nearby Archer Brewing—a pale ale and rice lager—contain 100 percent Australian ingredients and are always available on draft. The bar and shop also support independent wineries and distilleries from the region, with the shop hosting free weekly tastings that showcase a wide array of potent potables. —Alexander Gates

Hours: 3 p.m.–8 p.m., Monday–Thursday; noon–midnight, Friday & Saturday; noon–9 p.m., Sunday

Address: 23 Fish Lane, South Brisbane, Australia

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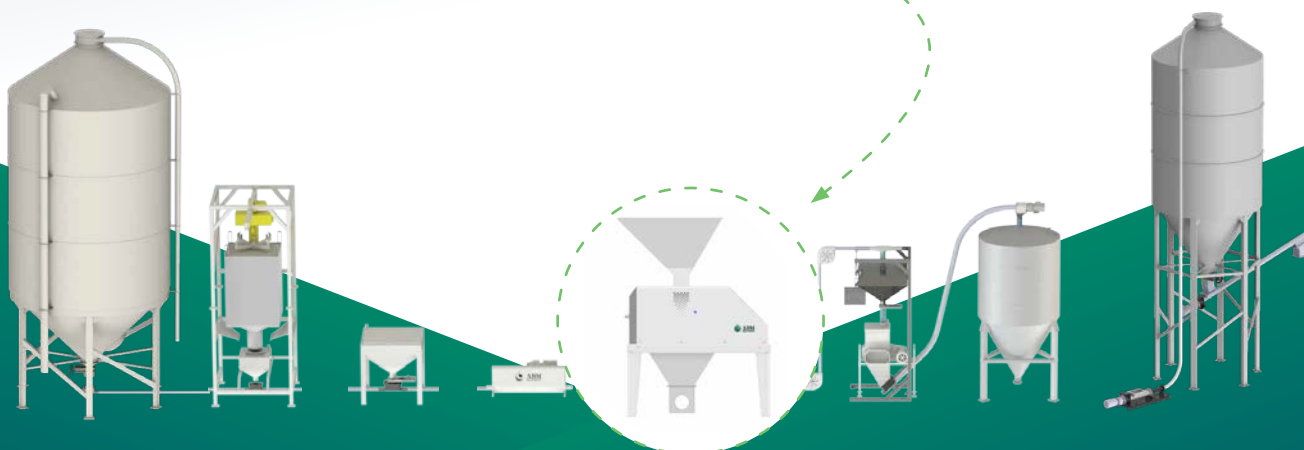


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PICK SIX

Classically Rooted Modernity

Seattle's Floodland Brewing may be hyper-focused on saison, but its founder's broad love of beer inspired this collection of favorites that span modern interpretations of lager, pale ale, cask ale, and—of course—saison. **By Adam Paysse**

TRANSPARENCY ABOUT INGREDIENTS, sourcing, and especially our influences has always been at the forefront of what I've tried to do with Floodland. For me, the importance of paying respect to those who came before us can't be overstated.

In revisiting a lot of the great Pick Six articles from past years, I was excited to be reminded how many of my favorites were mentioned—Taras Boulba, Orval, and so on. It got me thinking a bit about nostalgia for beers that were pivotal when I was developing my sense of style as a brewer—not quite the same as what's

fueled our progress as a small brewery, which is simply an ongoing love of beer.

I could talk ad nauseam about old Fantôme Saison and Ron-era Jolly Pumpkin Bam Bière. I could write essays about the importance of Hair of the Dog. In my emails, I practically *have* written essays about De Ranke, Thiriez, Blaugies, and Dupont.

As a group, we at Floodland are all bonded by a love of beer now, not just as a fond remembrance or a word spoken in passing while drinking light lager and Chablis. I am psyched to be able to share an incredible set of six modern beers made

by some of the absolute best breweries to ever do it. These are beers I want to drink every day, made by brewers whose work keeps me excited about making and drinking beer, day in and day out.

Machine House Dark Mild Seattle

Bill Arnott from Machine House has been holding down the cask-ale tradition for more than a decade in Seattle. Cask-conditioned ale served through a hand-pump is the greatest packaging format for beer that has ever existed. Packaging, storing, and serving these beers require great care and effort, but they yield an unparalleled product. Bill is well known for his Dark Mild, a 3.8 percent ABV powerhouse of drinkability. He's helped return this postwar version of the style to popularity over the past decade, and every year at Floodland we look forward to Machine House's March Mildness celebration.

If you're in Seattle, there is only one absolute essential stop, and it isn't my brewery. It is Machine House. Have a Dark Mild or five.

Heirloom Rustic Ales Plague Doctor

Tulsa, Oklahoma

I've had this petite (2.9 percent ABV) French-style lager with dandelion flowers in a few iterations, including the initial 750 ml bottle and the most recent can-conditioned version. At the end of a long brew day, there is nothing that disappears faster and is more thirst-quenching than this beer. (That's when we're lucky enough to have one or two on hand—they never last long.) Jake Miller of Heirloom has a knack for making beers that are both classic and transportive. How can a low-ABV lager like this serve as the ultimate lawn mower beer and at the same time have such phenomenal texture and dazzling aromatic complexity?

Suarez Family Hecto Hudson, New York

Everything this brewery does is staggeringly good. I drink the Suarez beers whenever I can—but being on the opposite side of the country, that is not nearly often enough. I would stuff my fridge full of anything they do. The lagers and mixed-culture beers are all absolutely dialed, but my personal favorites are their pale ales. I could have picked any of the various pale ales that Suarez produces, but I have particularly fond memories of Hecto.

Pale ale is my favorite style of beer, and—having spent the past eight years brewing nothing but saison—it's the thing I miss brewing the most. Every time I start to think I should start another

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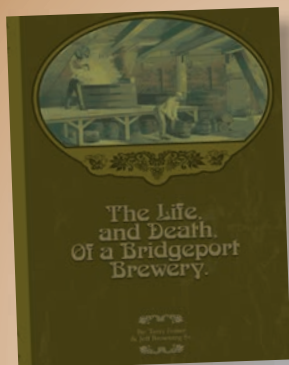


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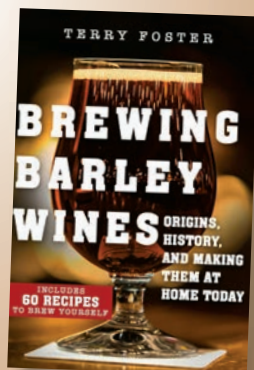


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| PICK SIX |

I could talk ad nauseam about old Fantôme Saison and Ron-era Jolly Pumpkin Bam Bière. I could write essays about the importance of Hair of the Dog. In my emails, I practically have written essays about De Ranke, Thiriez, Blaugies, and Dupont.

brewery to make cask beer and pale ales, I try to track down some Suarez instead.

Hecto is uncluttered, with an elegant malt backdrop that highlights the hopping and fermentation. This balance yields a delicate, dry, soft, and aromatic beer. The Suarez pales perfectly showcase hop profiles that bridge the gap between what's great about English ales and American ones, simultaneously floral and fruit-driven, and endlessly drinkable.

Wildflower Good as Gold

Marrickville, New South Wales, Australia

I spend so much time critically drinking our own beers that it can be difficult to find other saisons made in a similar modern style that I enjoy. The Wildflower beers are always an exception to that—they are joyful and exceptionally well crafted. Good as Gold stands out in my memory as a triumph of long and slow fermentation, both in barrel and in bottle. I can't imagine that saison brewers of old would have ever dreamt that one day someone would make a rendition of their beers as characterful and engaging as this.

Moonlight Misspent Youth

Santa Rosa, California

Over the past 20 years, very few breweries have been as consistently great as Moonlight. In the '00s and '10s, no trip to Santa Rosa was complete without a stop at Flavor Bistro, which had a wide variety of Moonlight beers on tap. The ESB was usually my favorite in those days—it's hard to choose between Death & Taxes and Reality Czeck as a second favorite of the old-school lineup.

In recent years, the beers have become even more consistent, and the lineup has expanded with a wide variety of exceptionally drinkable beers. Misspent Youth is my favorite of the modern Moonlight lineup—it's a beautiful hybrid of a modern pale ale's lighter malt with a classic floral and citrus-hop profile.

Heater Allen Pils

McMinnville, Oregon

The Northwest has been very fortunate for the past decade-plus to have both Lisa Allen and Kevin Davey brewing here. Having them both under one roof brewing at Heater Allen and Gold Dot is such a ridiculous concentration of talent that it borders on unfair, and I'm thankful my beers don't directly align for comparison with theirs.

This is yet another brewery that could fill out this entire Pick Six list by themselves—the choice between Heater Allen Pils or Gold Dot Export or Gold Dot Pils de Pils is just a matter of which I drank last. All three are about as good as it gets. Anyone who appreciates a gloriously bitter and aromatic lager knows that the Heater Allen Pils is king on this coast.

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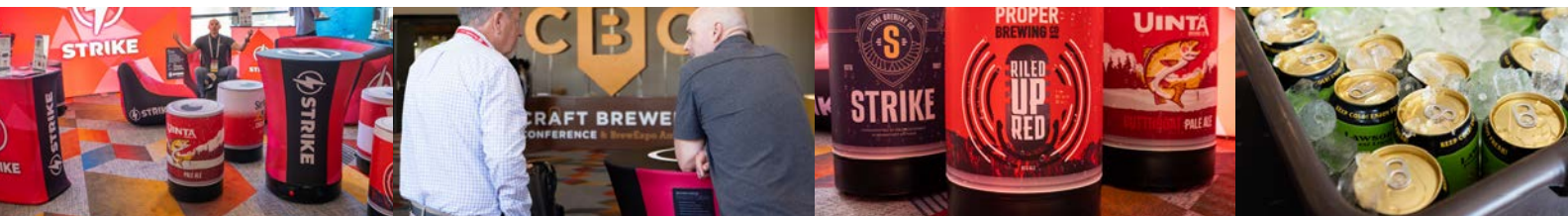
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Garlic

Roast us for it, if you must, but we won't mince words: Garlic beer could be a breath of fresh air. **By Joe Stange**

YOU CAN LOVE GARLIC dearly and yet feel absolutely dead certain that you never want to drink a beer made with it. "Garlic is wonderful," you may be thinking to yourself. "Leave it on the pizza."

If that's your view, are you sure you're in the right place? This is Special Ingredient. Go check out the Ask the Pros department—pretty sure we've got some Reinheitsgebot over there. Here is where we've taken serious looks at brewing with kimchi, pickle juice, beets, tomatoes, bacon, and Mexican flying ants. Frankly, garlic is one of the more mundane things we've considered.

So, let's consider it—and ignore that gut feeling that we might not want garlic's piquant pungency in our PILS.

First, ponder the parallels—because putting garlic into beer isn't the most insane idea we've considered. Lots of garlicky foods taste famously wonderful with beer—pizza, various pastas, crusty garlic bread, Japanese garlic rice, kimchi, basically anything with aioli ... we could go on. Clearly, there is at least some kind of affinity.

"Sure," you're thinking, "but those are foods. Garlic isn't a beer flavor." You sure? Ever taste a beer made with lots of Summit hops or with Columbus as a flavor addition? Some people (me, hi, it's me again) even like a bit of garlic-onion hop flavor in an old-school American IPA—preferably amid a whole mess of piney-dank grapefruit peels, to be sure. But it can work.

So, there we have it: Garlic is a beer flavor—or, at least, beer-adjacent.

Having established that, we won't deny that it would be painfully easy to make a really awful garlic beer—on purpose or otherwise. With that in mind, let's look at how some of the pros have used it with some success.

Crushing It

As it happens, my first encounter with garlic in beer was a positive one. I'm thinking of a little-known Belgian ale from

a small brand called Jessenhofke, based in Hasselt. The Jessenhofke Tripel first appeared in 2007.

When I tasted it that year, I had no idea there was garlic in it, but I did pick up what I described as "a fried, savory element buried deeply." (Thanks for the memories, RateBeer.) That note didn't bother me, apparently; I was just happy to find a tripel that was bitter enough, for a change, rather than another sweet one loaded with coriander. "The flavor was not as strange as the idea," I wrote, once I learned what was in there.

Fast-forward 18 years—ouch, please give me a moment for a wistful montage—and Jessenhofke's Gert Jordens says they still add a small amount of fresh, sliced garlic at the end of the boil. They also add it to several other beers, including their Maya blonde ale and spicier PMPRNL tripel, as well as their dubbel, a reserva-style strong dark ale, and a winter ale. So, garlic is part of the Jessenhofke house character—but subtlety is key.

Fellow Midwesterners might remember another beer from that time—coincidentally, it also first appeared in 2007. The quasi-legendary Mamma Mia Pizza Beer was the brainchild of homebrewer Tom Seefurth, who took it to America's Brewpub in Chicago and later to Sprecher in Milwaukee. In concept, it was a "saison" flavored with fresh garlic, basil, oregano, and a lot of tomatoes. The press loved it, it went viral, and Jay Leno even joked about it on the *Tonight Show*.



While Seefurth was still at Sprecher, they were producing batches of up to 80 barrels, distributing to 11 states, and exporting to three countries. The last batch they brewed was in 2013. Reached by email, Seefurth says Sprecher ran out of capacity when they started leaning into hard sodas. Twelve years later, reviving that brand is still on his mind.

When it comes to the garlic, he mentions that grower Christopher Ranch of Gilroy, California, once featured their beer in a Facebook post. "Their garlic is sweet, with a bite that is not harsh versus the products coming from overseas," Seefurth says. "It's important to taste the raw ingredient by itself, just as you would taste a raw grain or coffee bean. ... We smashed the garlic in between two food-grade poly bags—as seen on several news feeds! Use it like you would hops."

Finally, given Sam Calagione's enthusiasm for unconventional ingredients, it's not surprising that Delaware's Dogfish Head has had a go or two at beers with garlic in

them. Brewed in 2013, Garlic Breadth was a London-style porter of 6 percent ABV, and it featured black garlic. That variation comes from an Asian tradition of warm-aging garlic until the cloves turn dark—not from mold or fermentation, but from a slow Maillard reaction that softens the flavor and adds sweetness.

The brewery added the garlic to the whirlpool, after the boil, describing the result as “full of chocolate and espresso notes,” as “the nuanced garlic in the finish complements the natural earthiness of this style.”

Savory Depth (Charge)

No serious researcher can slice into the study of garlic beer for long without finding out about a brewery in Rock Island, Illinois, called Radicle Effect. One of their most popular beers—a genuine local favorite that pleases enough palates to score near 3.9 on Untappd—is their Roasted Garlic Stout.

“The beer was born out of necessity,” says Rich Nuñez, owner and head brewer at Radicle Effect. “I went to brew a stout at a friend’s house, and I realized after we started brewing that I had forgotten my hops. He had none, so I raided his kitchen trying to find something that could be used as a bittering agent, and I found a jar of minced garlic. I figured, if I cooked the oil off and then used the burnt garlic, it would impart bitterness but very little impact from the garlic. The end result was a stout like I have never tasted before.”

That was only the start. He continued to work on the recipe until it was something he believed he could sell—he describes it as a tricky four-year process of trial and error.

The base is “a roasty stout, and semisweet,” Nuñez says. For the garlic, he says he prefers to use elephant bulbs—larger ones with a milder flavor—if he can find them.

“Because the garlic is roasted—and I roast the garlic myself—it makes the garlic intensity very mellow. This allows the stout to still taste like stout and not a garlic bomb. The garlic is present in the aroma, but very subtle in the up-front flavor. It’s more of an aftereffect. Once you have had a couple of drinks, you will notice the garlic as you start to exhale or belch.”

They add the garlic on the hot side. “In doing so, it extracts the essence of the roasted garlic without adding any astringent elements,” Nuñez says. “You have to realize that you are adding a very oily substance to the brew, which can create problems down the road if your brew system is not properly cleaned.”

He also advises brewers “to understand that garlic is a very powerful and pungent ingredient to add to any style of beer. When [you use it] raw, be careful—a little goes a long way. When the garlic is roasted, it becomes more mellow, less intense, and becomes buttery. Always remember: It’s easier to add than it is to take away.”

The Roasted Garlic Stout, not surprisingly, goes well with savory foods such as meats and cheeses, Nuñez says. He adds that local chefs and customers also have used it as an ingredient in sauces, brines, and chili.

Then there’s the Garlic Depth Charge—another local favorite when Radicle Effect celebrates the release of the Roasted Garlic Stout twice per year, in mid-summer and around Christmastime.

“This is a peppered steak in a glass,” Nuñez says, “the most savory shot you will most likely ever have. It’s our garlic stout and a shot of our garlic-and-peppercorn vodka. Pour the shot into the glass with the garlic stout, and it becomes a garlic-steak sensory overload.”

Radicle Effect is a tiny brewery with a small taproom. With 10 beers on tap, about half are usually its own beers, and the guests always include Schlitz. (Try the Pickle Schlitz, which is exactly what it sounds like.) Yet Roasted Garlic Stout Day—with only four kegs produced—is an event, and the Garlic Depth Charge is a highlight.

“We are a very small place,” Nuñez says. “But our record for most Garlic Depth Charges sold in one day is 157.”



MAKE IT

Radicle Effect Roasted Garlic Stout

From owner and head brewer Rich Nuñez at Radicle Effect Brewwerks in Rock Island, Illinois, here’s a homebrew-scale recipe for the local cult favorite they release only twice per year—four kegs, and it’s done. Medium-bodied and roasty, he says it “still tastes like a stout but with subtle garlic nuances in the finish.”

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.070 (17°P)

FG: 1.017 (4.2°P)

IBUs: 30

ABV: 7%

MALT/GRAIN BILL

12 lb (5.4 kg) pale two-row

15 oz (425 g) roasted barley

13 oz (369 g) black barley

HOPS & ADDITIONS SCHEDULE

0.5 oz (14 g) Chinook at 60 minutes
[21 IBUs]

0.8 oz (23 g) East Kent Golding at
30 minutes [9 IBUs]

1–1½ elephant garlic bulbs, roasted, at
flameout/whirlpool

YEAST

Omega OYL-005 Irish Ale

DIRECTIONS

Mill the grains and mash at 155°F (68°C) for 30 minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to get about 6 gallons (23 liters) of wort, depending on your evaporation rate. Boil for 60 minutes, adding hops according to the schedule. After the boil, do a whirlpool step: Stir or recirculate to create a vortex, add the garlic, spin for 10 minutes, and allow 10 minutes to steep and settle. Chill the wort to about 68°F (20°C), aerate, and pitch the yeast. Ferment at 68°F (20°C) until complete and gravity has stabilized. Crash, package, and carbonate to about 3 volumes of CO₂.

BREWER’S NOTES

Adding the roasted garlic on the hot side extracts its essence without adding any astringent elements. Realize that you are adding a very oily substance to the brew, and that can create problems down the road if your brew system is not properly cleaned.



STYLE SCHOOL

Modern Chicha:

Sacrificing Misconceptions of an Ancient Beer

Forget the chewing and the spitting. The Americas' most important indigenous beer is alive and well today, connecting old traditions with curious drinkers. **By Martin Thibault**

IT'S EVERYWHERE—HIDDEN IN HOUSES behind humble white flags hanging from bamboo poles or found at the entrances of vast Inca sites with concentric circles manicured for history buffs and tourists.

Sometimes they serve it in tiny, hand-size bowls made from the hardened skin of local fruit; at others, they hand it to you in massive mugs that echo Bavarian beer-hall culture.

Once you're in the Andes—from the northern tip of the South American continent all the way down to the sacred valley of Peru and Bolivia beyond—it hits you: One of the world's most fascinating, time-tested brewing cultures still thrives to this day.

And it's almost completely misunderstood by most of the Western world.

Of Prayers and Confusion

For Westerners, attempting to grasp the chicha universe can be confusing.

Not only does the word “chicha” enjoy many meanings in various contexts, but the beverage itself has many variations that depend on regionality, season, and local legislation. For example: While the classic

recipe's grain bill is entirely based on malted maize, the meaning of the word “chicha” depends on where you are in Latin America. Rice, cassava, and quinoa may also be part of the brew, as can pineapples, bananas, and wild strawberries.

From a technical standpoint, brewing recipes abound. So do misconceptions.

No, most of these brewers don't chew their corn. No, most of these brewers don't spit to provide the enzymes to convert starches into fermentable sugars.

Homemakers and professional chicha brewers alike either grow their corn themselves or buy it from a nearby farmer. They either malt the corn themselves or buy it from a seasoned local maltster. They either ferment their wort with their own house slurry, lathered in the fermenting pots or coating the brewing implements, or they let Pachamama—Mother Nature—do her thing.

Yes, in the sweltering jungles east of the Andes, indigenous tribes still chew and spit. Yes, these people still serve their chicha at rites and social gatherings. Back in the Andes, however, from the lowlands to the highlands, Quechuan people see chicha as the backbone of a healthy pub culture, in which political discussions, daily banter, and relaxing after a hard day's work are the norm.

The earthen ground in the more rural *chicherías* may be pocked with small craters made by liquid, voluntarily dropped as an offering—say, a prayer for a good harvest—but that is all. The rest is anecdotal.

From Field to Froth, in a Fruit-Shell

To malt the corn, the *chicherero* leaves the kernels in water to accumulate moisture, then takes them out to germinate. The duration of each step depends on the family recipe—the recipe itself linked to the corn variety, altitude, and equipment used. (Famously, Peru has more than 50 distinct varieties of corn.) The result is then sun-dried and ground.

If that malting process sounds pretty standard, that's because it is.

Brewing can then commence. The brewer steeps the malted corn flour in tepid water, often heating it up to a boil. Boiling lasts a few minutes, or a few hours, before the wort is filtered, cooled down, and sent to fermentors—often already lined with the microflora necessary to transform the wort into chicha. Some brewers add panela sugar to help get the desired result. After a couple of days, the beverage has reached an alcohol volume close to 3 percent ABV, ready to be served to the public.

These processes likely sound familiar. The chicha made by the Quechuan populations of the Andes is a malted-grain beer with a yellow complexion not unlike hazy IPA—sometimes crowned with a frothy head of foam, sometimes looking more like an unblended lambic—but almost always with soft, cask ale-like carbonation.

Occasionally, they serve it in a large glass tumbler; at other times, in a dried fruit's husk.

PHOTO: MATT GRAVES/MGRAPHS.COM



MAKE IT

Off Color Wari

John Laffer, cofounder of Chicago's Off Color Brewing, shares this recipe for their chicha-inspired ale brewed in collaboration with the Field Museum of Natural History. Informed by archaeological finds from the Wari people of southern Peru—dating to more than 1,000 years ago—it includes purple corn and *Schinus molle* berries, aka pink peppercorns.

ALL-GRAIN

Batch size: 5 gallons (19 liters)
Brewhouse efficiency: 72%
OG: 1.044 (11°P)
FG: 1.010 (2.5°P)
IBUs: 8
ABV: 4.5%

MALT/GRAIN BILL

6.2 lb (2.8 kg) pilsner malt
 1.7 lb (771 g) purple corn
 1 lb (454 g) rice hulls
 6.5 oz (184 g) honey malt

HOPS & ADDITIONS SCHEDULE

0.6 oz (17 g) Saaz at 60 minutes
 (or ~8 IBUs of any variety)
 0.25 oz (7 g) pink peppercorns
 at flameout/whirlpool

YEAST

Mixed culture with *Lactobacillus* and a saison strain

DIRECTIONS

Crush the corn, soak it in 4 quarts (3.8 liters) of water, and skim off the germs that float to the top (see Brewer's Notes). Mill 4 oz (113 g) of the pils malt, add it to the corn, and do a cereal mash: Heat to 158°F (70°C), rest 20 minutes, then bring to a boil. Meanwhile, mill the remaining grains, mix in rice hulls, and mash in at 150°F (66°C). Then mix in the cereal mash, bringing the combined mash to about 158°F (70°C). Rest 60 minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to get about 6 gallons (23 liters) of wort. Boil for 60 minutes, adding the hops and peppercorns according to the schedule. After the boil, chill to about 70°F (21°C) and pitch the mixed

culture. Ferment at ambient temperature, allowing it to rise as high as 78–80°F (26–27°C), depending on your chosen culture. Once fermentation is complete, crash, package, and carbonate as desired.

BREWER'S NOTES

Purple corn: *Maíz morada* is available online or possibly at your local Latin American grocery. You should degerm the corn, or the oils in the germs will run havoc. If gently crushed then soaked, the germs float, and you can skim them off that way. Optionally, you could sub in flaked corn at the same ratio to avoid both degermination and the cereal mash—but nobody makes flaked purple corn. You could use hibiscus if the color is important to you. Strawberries are another common addition to chicha morada.

Fermentation: Traditional chicha fermentation is mixed-culture, including various *Saccharomyces* strains and lactic-acid bacteria. At Off Color, we blend in a bit of *Lacto*-acidified, non-hopped beer from our *Lacto* tanks. We prefer a saison strain for attenuation and profile—Wyeast 3711 French Saison if you want more pepper, or Wyeast 3726 Farmhouse Ale for more bubblenum. Other options include *Lachancea* (WildBrew Philly Sour), mixed pitches such as White Labs WLP4675 Farmhouse Sour Ale Yeast Blend, or a short kettle-acidification with *Lacto*, followed by re-boiling with hops and a saison pitch. Whatever path you choose, you're looking for tartness, not full-on acidity.



The Sources of Sourness

From colonization and armed conflicts driving people from ancestral lands to state authorities convincing the population that foreign drinks are more sanitary, South American chicha culture has endured many setbacks over the past few centuries. Both globalization and local legislation have soured outlanders to the idea of drinking the age-old beer.

The craft-beer scene, however, has already started to build bridges between urban cosmopolitanism and local traditions. Cervecería Barbarian, a microbrewery in Lima, Peru, brews Chicha Tu Mare—a dry, tart beer not unlike a Berliner weisse in character, but made with corn and quinoa. Sereno Moreno—an inviting, brightly-lit pub in Quito, Ecuador—serves various flavors of their house chicha complete with tasting glasses and growlers to go. Chichería Demente in Bogotá, Colombia, is an atmospheric, upscale restaurant proud to brew its own hazy chicha, served alongside traditional cuisine imbued with contemporary flair. And the list goes on, from Cuzco to Otavalo.

These chichas represent a wide range of ingredients and approaches to fermentation, with serious potential to inspire modern brewers elsewhere.

Consider: Researchers have studied the breadth and complexity of the chicha fermentation, proving scientific worth even beyond its obvious cultural and historical significance. In one study, they sequenced 27 samples from 14 chicherías in seven Peruvian provinces, finding wide variation in microbial composition—though more than half featured *Lactobacillus*. In another study, researchers found that the chichas of Ecuador contained 26 species of yeast; *Saccharomyces cerevisiae* and *Torulaspora delbrueckii* were most prominent.

Experts as well as brewers are learning more about the origins of chicha's signature tartness—surely a feature that could pique the interest of brewers worldwide, much as they adopted the use of Norwegian kveik.

PHOTOS: MARTIN THIBAUT

A Condor's-Eye View over the Andes

Loss of habitat may have threatened chicha, but—like the Andean condor—its sacredness and symbolic power remain relevant to this day. To highlight its regional expressions, here's a quick flight over its producing countries.

PERU

For now, the Peruvian Andes are the showpiece of chicha-brewing culture ... in Western eyes. Tourism money in the Sacred Valley—from the UNESCO-protected Cusco town center to the world-renowned mountain holy site of Machu Picchu—has spawned overt advertising.

Instead of a plain flag hanging out front, colorful menus, large drinking halls, and road signs with actual words such as *chichería* or its Quechuan equivalent, *aqha wasi*, invite visitors to confidently sit with a *caporal*—a huge tumbler glass—of the foamy, sour brew. *Frutillada*, a pale pink strawberry-infused version of the ubiquitous yellow *chicha de jora*, is very popular here as well.

Northern Peru, around the Piura area, is slightly different, more akin to the Bolivian approach. Served in a dried gourd, the chicha is less foamy, dominated by its funky yeast and bacteria signature.

BOLIVIA

The Cochabamba valley, southeast of the university town of Cochabamba, may appear quiet and rural, but community life bustles within the *chicherías*.

Furthermore, this area away from the touristic hotspots of Uyuni, La Paz, and Titicaca is home to the largest density of Bolivian chicha brewers. Often women, they use eucalyptus wood to fire up their cauldrons. Producing billowing masses of eye-stinging smoke, the malted-corn mash can last many hours before they transfer the wort and heat it to a boil.

The ensuing cooling and fermentation—in containers lined with the house slurry—can take anywhere from a couple days to a week depending on the season, the temperature, or the social events on the calendar. Each family produces chicha with its own recipe, and only a few open their doors to locals. The sign to look for in these parts is a white flag hanging outside a house's main door or front window—Quechuans understand this clearly, but it may be enigmatic to travelers. Its message, though, is simple: *This house is a chichería, chicha has recently been brewed here, and it's now ready to be served. Do come in.*

The chicha produced here is served in a small bowl, often made from the hardened shell of the orange-sized fruit of the calabash tree. It is nearly flat, and it tastes tart, fruity, and mildly funky.

ECUADOR

While other Andean countries tend to focus on specific geographic locations and one main ingredient—malted corn, or *jora*—Ecuador offers a plethora of chicha styles along its highlands.

The classic *chicha de jora* is a common option, but the town of Otavalo also has *chicha de yamor*, famously made from seven different types of corn: yellow, white, dark, chulpi, canguil, morocho, and jora. *Chicha de morocho* and *chicha de yuca*—made from cassava and palm seeds—can also be found in the mountains. Several traditional restaurants offer chicha along the main roads away from Quito, as well as in surrounding towns and villages.

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Left from top: A chichera dries malted corn; serving apparatus in a chichería

COLOMBIA

The story of chicha in Colombia clearly speaks of the trouble brewed by colonization.

Not only did the Colombian government ban the brewing and selling of chicha as recently as the 20th century for what they claimed were sanitary reasons, but archbishops, royals, and city officials were all among those who'd banned it before. Law 34, ratified in 1948, was specifically written and enforced to allow German-style beer to take over the market, revoking the locals' rights to sell chicha in their own country.

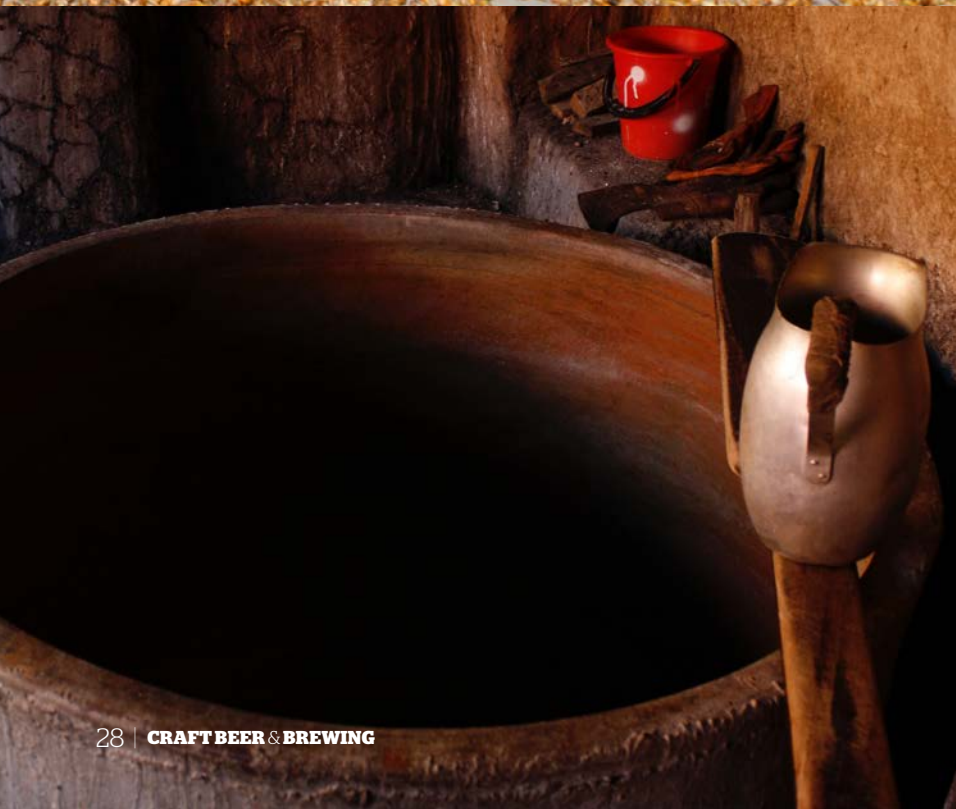
Despite that legal context, Bogotá is a vibrant center of chicha brewing today, with festivals and bistros offering many versions of the beer. Corn malt is still the main ingredient, but variations include rice, yuca, and those flavored with pineapple. The fall festival held in Bogotá's La Candelaria is easily the best opportunity to sample diverse flavors without doing much research.

Beyond the Rituals

Yes, chicha was a ceremonial beverage of the Inca Empire, linked to supernatural invocation, imperial rituals involving virgin women, and even socializing. And yes, its history is ripe with such juicy kernels, and evoking them is important.

Yet as compelling as these historical elements are, chicha today is a thriving modern beverage—albeit one with ancient roots. It's a vehicle for gathering people, a locus for community life and family tradition.

Chicha is alive, it's diverse, and it's a fascinating gateway to better understanding various cultures—well worth seeking out, beneath the unassuming flutter of a simple white flag. 



Chicha Culture's Cultures

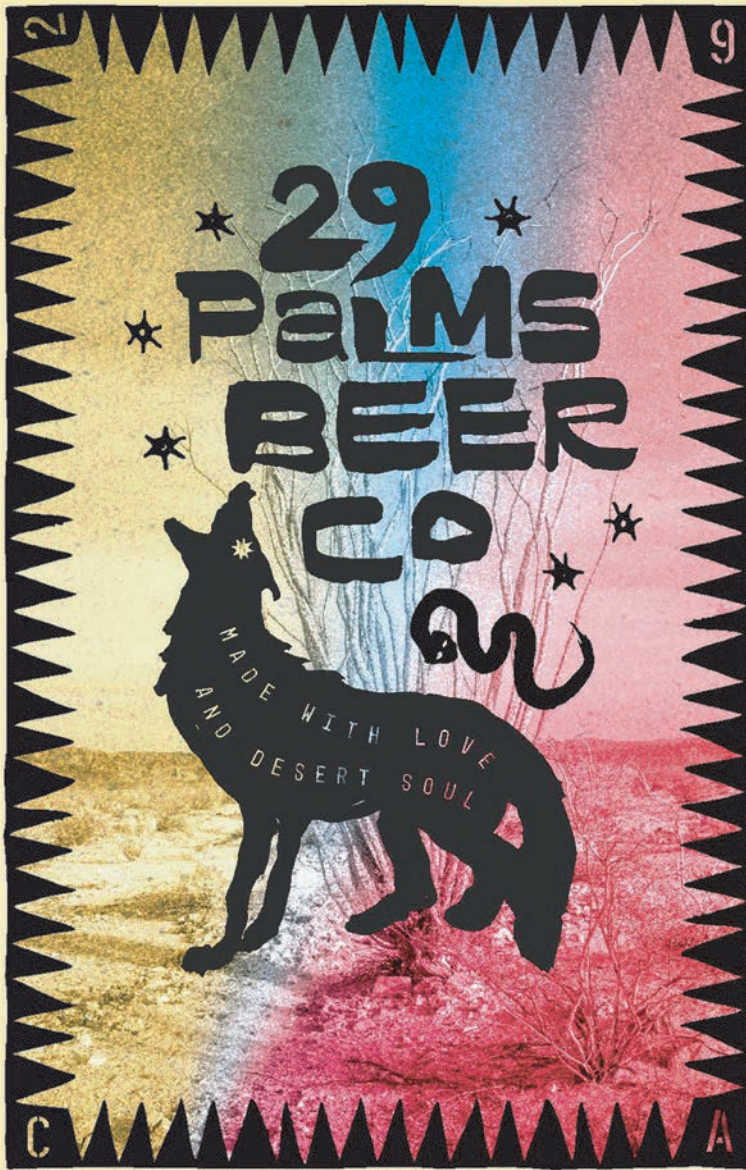
Want to chew further into the complexities of chicha fermentation? These two studies are a good place to start:

"Peruvian *Chicha*: A Focus on the Microbial Populations of This Ancient Maize-Based Fermented Beverage," by Daniela Bassi et al, in *Microorganisms*, January 2020.

"*Saccharomyces Cerevisiae* Populations and Other Yeasts Associated with Indigenous Beers (Chicha) of Ecuador," by Fernanda Barbosa Piló et al, in the *Brazilian Journal of Microbiology*, October–December 2018.

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STYLE SCHOOL California's Uncommon: A Steamy Story from the Old West

A type of beer peculiar to American history has managed to survive, if not always thrive, as a New World style steams into its third century. **By Jeff Alworth**

BEFORE ALL THIS IPA business, Americans hadn't done a lot to contribute to the world's canon of beers. One notable exception, however, is a frontier-era invention—a lager improvised to ferment along the ice-free parts of the West Coast.

Steam beer isn't the only minor style that Americans improvised—cream ale, brilliant ale, Pennsylvania swankey, Kentucky common, and others all had their moments. Most of those didn't survive Prohibition, if they made it that far. Steam beer lasted, however, because a dedicated practitioner kept making it: San Francisco's Anchor Brewing.

Like any enduring style, steam beer had to survive some close calls and scrapes. The first challenge was refrigeration, which allowed brewers to chill their wort and lager their beer—it threatened to make steam beer obsolete. It was already endangered by the 1910s, despite how cheap it was in the taverns. Then came Prohibition, which wiped out most of

the old breweries dedicated to making it. After 1950, only Anchor was left. The story of its rescue, days before it was going to close forever, is legendary—not least because the new owner, Fritz Maytag, became a beacon and mentor to entrepreneurs who would visit him with dreams of starting their own breweries.

Yet there's one final, strange wrinkle to this story: In 1981, the federal government granted Anchor the trademark on "steam beer." We know about steam beer because Anchor managed to survive, but this act codified it. (Anchor did finally close in 2023, but—because history rhymes—it was saved once more by a new benefactor: Chobani's Hamdi Ulukaya.)

The trademark meant that other breweries could make something in the fashion of the old style, but they couldn't call it "steam beer." The industry collectively agreed to call them California commons, but that was always an awkward kludge. It always meant steam beer, but since there was now just one living example, steam beer meant Anchor.

That leaves us to consider the question of what this style was, what it became, and now—with Anchor's status up in the air—what it could still become.

Frontier Beer

Writers sometimes characterize steam beer as a San Francisco original, but people also brewed it in Alaska, Nevada, Washington, and Oregon, where it was especially popular.

It arrived after 1850, when German immigrants were shifting American brewing toward lager; really,

PHOTO: MATT GRAVES/IMAGESPHOTO.COM



steam beer was just lager beer made quickly and cheaply, without refrigeration. In fact, people just called it lager from the 1850s to the 1870s—so what if breweries couldn't ferment it cool or cold-condition it? Its virtue was being cheap to make and to drink—a central selling point. The word “steam” came into vogue in the 1860s, when some breweries were still calling the style “lager,” but “steam” didn't become the default label until the 1880s.

There are various accounts about why people called it steam beer, and for years Anchor favored the explanation that it referred to the coolships that sat atop the breweries—hot wort sent steam out the vents into the foggy San Francisco air. But it's far more likely that the name has to do with the beer's carbonation; contemporary sources placed the pressure in the barrel as high as 70 psi. (The carbonation surely varied, but if we assume that pressure at an ambient 72°F/22°C, we could be looking at beer with a Champagne-like five volumes of CO₂ when tapped.)

Brewers added kräusen to get secondary fermentation in the barrel. The beer

was so effervescent that one company developed a special tap to dispense it. English writer and beer historian Martyn Cornell notes a German-language source from 1871, written by brewer Hemmann Hoffmann, who describes how bars of the era served the beer. Breweries made two versions of it—one flat and one carbonated—and bartenders blended them for customers. The fact that they called the carbonated version steam beer lends credence to the second explanation.

It was a regional drink, but multiple sources documented steam beer during its heyday. It wasn't really a “style” as we understand it today. It was a beer fermented with lager yeast at warmer temperatures, not lagered, and kräusened to produce effervescence.

“Mashing methods vary greatly,” write Max Henius and Robert Wahl in 1901, in their *American Handy Book of the Brewing, Malting and Auxiliary Trades*. They go on to detail both German step-mashing and British infusion-mashing methods. The grist might include adjuncts, or not, and the beer might be pale or amber.

It was more of a category—ultimately separate from lager as well as ale, partly because it was much cheaper.

A Style or a Beer?

João Alameida had a successful career going when his eye started to wander.

“When I was working in banking, I would have to work a weekend,” he says. “So, I'd have a weekday off, and at least once a month I'd go on that brewery tour at Anchor.”

He eventually left banking and started leading those tours, becoming the brewery's taproom manager. Maytag had sold the brewery by then, but a lot of the old-timers were still around.

“I would stay and put in some time after my shift, and have a half-pint or two, and talk to people and see what made the

place tick from the inside,” he says. When he had the chance to jump to production, he did, starting on the lowest rung of the brewing ladder.

Not many breweries get that kind of reverence, but Anchor has earned it. As craft brewing went from quirky niche to established segment, respect for Anchor grew. Maytag expanded the brewery's line, which went on to feature multiple standards such as Liberty Ale, Porter, Christmas Ale, and Old Foghorn Barleywine. Yet always towering above these was the style that doubled as the brewery's name in many consumers' minds: Anchor Steam.

While working on this piece, I surveyed several brewers about whether they thought California common was a style with a range of expressions, or more like a tribute band where every version is, to some degree, an homage to Anchor. They were mostly in agreement: It's the latter.

Firestone Walker's Sam Tierney puts it best: “It's a style that went through a very tight evolutionary bottleneck, and basically nobody has been able to popularize any significant deviations from Anchor, as far as I know. We brewed one this year, and it wasn't a clone but was pretty close.”

Atlas Brew Works in Washington, D.C., may be a case in point. They launched the brewery with a beer called District Common, alluding to the style from the opposite coast. They envisioned it as an approachable session beer that combines crisp lager drinkability with subtle, ale-like esters.

By the time Atlas opened in 2013, caramel malt was already falling out of favor, and they brewed District Common with a grist of one-third Munich and two-thirds pilsner malt. Yet Daniel Vilarrubi, director of brewing operations, says the beer “is among our lower performers. It's pretty popular among the staff, but I don't think it's a crowd favorite.”

They're proud of the beer, and it has a fervent, if small, fan base. But the market



Open fermentors at the Anchor Brewery in San Francisco, circa 2022

People just called it lager from the 1850s to the 1870s—so what if breweries couldn't ferment it cool or cold-condition it? Its virtue was being cheap to make and to drink—a central selling point. The word “steam” came into vogue in the 1860s, when some breweries were still calling the style “lager,” but “steam” didn't become the default label until the 1880s.

has shifted away from the model Anchor created in the late 1960s.

Where beers made in that style have survived, they've moved away from its origins. One of the more enduring versions is Dorothy's New World Lager, from Toppling Goliath in Decorah, Iowa. The brewery originally brewed it as a tribute to Iowa-born Maytag. Yet this beer has evolved, too.

"As our brewhouse has become more advanced," says brewmaster Mike Saboe, "we slowly transitioned toward a more traditional lager, with the incorporation of multiple mash rests and colder fermentations."

The One and Only

Alameida is still brewing in the Bay Area, but he's moved on to Almanac, where he's production manager. He says the brewery is planning to produce a California common in 2025, so I was curious about which approach he'd take.

"For myself, I would just try to keep things as much the same as possible," he says. Anchor used a step mash, open fermentation, and kräusening; Almanac's system isn't designed to do everything like that. Otherwise: "It's basically 40° Lovibond caramel and two-row, and that's pretty much it. And then, you know, Northern Brewer is the hallmark of steam beer. The things that shine for me with steam beer [are] the mouthfeel, the caramel, the foam. A lot of things are going on there, like the way the esters dance on the nose and such, that velvety foam, and the high carbonation that is a hallmark of that style—oh, and the kräusening practice."

Northern Brewer hops weren't around when steam beer was young. (In his book *Brewing Local: American-Grown Beer*, Stan Hieronymus writes that they used an obsolete variety called, unappetizingly, Large Gray American.) Crystal malt wasn't around, either, and many breweries were using six-row malt.

But that was old steam beer, not Anchor Steam, which really is the only standard remaining. It's not usual for a single beer to define a style, but it's not unheard of, either. My mind turns to Guinness, referenced by every brewery making a 4.2 percent ABV "dry Irish stout."

If and when Anchor Steam returns, it will resume its place as the archetype. Forty-four years on from the trademark, and 60 since Maytag bought the brewery—roughly half its life ago—Anchor has come to define the style.

For early breweries in the craft era, that may have been because of a trademark. Today, however, it's because Anchor Steam is all anyone can remember.

MAKE IT

Barrique Fritz Steam Beer

From Barrique Brewing & Blending in Nashville, Tennessee, head brewer Spencer Longhurst shares this recipe from a collab with their friends at Von Trapp in Stowe, Vermont. Inspired by Anchor Steam, the brewers named the beer after Von Trapp brewing operations director Tom Everett's dog, "with an obvious ode to Mr. Maytag," Longhurst says.

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.052 (12.9°P)

FG: 1.012 (3°P)

IBUs: 36

ABV: 5.2%

MALT/GRAIN BILL

7 lb (3.2 kg) Weyermann Pilsner
1.2 lb (544 g) Weyermann Munich I
12.5 oz (354 g) Weyermann CaraMunich I
6 oz (170 g) Weyermann Rye Malt
4 oz (113 g) Weyermann Acidulated
1.5 oz (43 g) Weyermann Carafa
Special III (added at sparge)

DIRECTIONS

Mill all the grains, but keep the Carafa separate. Aiming for a 4:1 liquor-to-grist ratio, mash at 131°F (55°C) for 10 minutes; then raise to 144°F (62°C) and rest 45 minutes; then raise to 158°F (70°C) and rest 15 minutes. Prepare for a decoction: Transfer about one-third of the mash volume to a separate kettle, bring it to a boil, and boil for 18 minutes. Return that portion to the main mash, which should raise the temperature to about 169°F (76°C); rest 15 minutes then mash out. Recirculate until the runnings are clear, then run off into the kettle. Add the Carafa atop the grain bed before sparging, then sparge and top up as needed to get about 6 gallons (23 liters) of wort, depending on your evaporation rate. Boil for 90 minutes, adding hops according to the schedule. After the boil, do a whirlpool step: Stir or recirculate for about 5 minutes to create a vortex, add the whirlpool hops and continue to spin for 15 minutes, then allow 15 more minutes to steep and settle. Chill to 50°F (10°C), aerate the wort, and pitch the yeast. Ferment at 58°F (14°C) until complete and gravity has stabilized. Once the beer has passed a forced VDK test (see "Hunting for Diacetyl," beerand-brewing.com), gradually drop the temperature by 2°F (–1°C) per day until it reaches 30°F (–1°C), then lager 5 weeks. Package and carbonate to about 2.9 volumes of CO₂.

BREWER'S NOTES

We have a 20-barrel, steam-heated brewhouse with a cereal cooker, making step mashes and decoctions relatively easy and part of our standard procedure. This recipe also calls for a typical modern lager fermentation. For one that might be closer to traditional steam beer, you could use a Cal common yeast strain (such as White Labs WLP810 San Francisco Lager) and allow fermentation at near-ambient temperatures (58–68°F/14–20°C), then condition in the keg but skip the cold temperatures—the lack of refrigeration was how this style came to be. We also lagered this beer in former wine barrels—not quite traditional, but perhaps an echo of the old ways of conditioning in casks before tapping them on the bar.

HOPS SCHEDULE

0.33 oz (9 g) Hallertauer Magnum at first wort [18 IBUs]
0.33 oz (9 g) Northern Brewer (U.S.) at 30 minutes [8 IBUs]
0.33 oz (9 g) Northern Brewer (U.S.) at 15 minutes [6 IBUs]
0.33 oz (9 g) Northern Brewer (U.S.) at whirlpool [4 IBUs]

YEAST

Fermentis Saflager W-34/70 or other 34/70 strain





Ask the Pros...

Techniques, ingredients, and histories behind some of the world's most compelling beers, as shared by the brewers themselves. **By Ryan Pachmayer**

Bayer Theinheim Landbier

Brauerei-Gasthof Bayer, Theinheim, Bavaria, Germany

STEFANIE BAYER IS THE FUTURE of the Brauerei-Gasthof Bayer in Theinheim, in Lower Franconia, about 30 minutes' drive west of Bamberg. The brewery has been here for more than three centuries—the year 1718 proudly adorns its labels—and its flagship Landbier draws hikers, bikers, and beer lovers from across the region.

Many in the Bayer family are brewers. Stefanie's uncle Helmut is the current

head brewer; Helmut's son is a brewer, too, learning at nearby Brauerei Ulrich Martin in the town of Hausen. Stefanie's grandfather Hermann was a brewer, too, and so is another cousin of hers.

Stefanie Bayer herself is formally trained, having completed her education at Doemens Academy in 2022. She primarily works in the restaurant and in the office, but she occasionally brews when her uncle is on holiday or the brewhouse is otherwise shorthanded.

What's a Landbier, Anyway?

Her preferred beer is their Landbier, she says. The word simply means “country beer”—it's not a clearly defined style.

Much like “kellerbier,” “landbier” is more a product of local context than it is any reliably consistent traits. (See “The Bier from the Keller,” [beerandbrewing](#)

.com.) Try to describe the category with anything besides broad strokes, and exceptions inevitably slip out.

Stefanie describes their own Landbier as flavorful, drinkable, and semi-dry. “It's lighter colored, not as hoppy as a pils,” she says. They don't call it kellerbier, but she says the Landbier is what people get when they ask for kellerbier in the taproom, and nobody minds. (Franconian beer drinkers aren't fussy about styles. When pressed, a friend of mine from Bamberg says the one thing that defines kellerbier is that you can always taste all its ingredients.)

Whatever you call this Landbier, you can certainly taste every aspect of it. The components are all there—from lightly toasted Munich malt to the breadly pils base, the clean but smooth bitterness, and the soft flavor of some of the finest German Noble hops. It's breadly and malty but also slightly hoppy and snappy—tasting like an export lager but with less alcohol (4.7 percent ABV), and it's served fresh and unfiltered.

PHOTOS, CLOCKWISE FROM LEFT: JOSE SANTOS CARGO; RYAN PACHMAYER(2)

Brewing the Landbier

Stefanie says the beer's bready base is an 80/20 mix of pilsner and Munich malts from Bamberger Mälzerei, a favored maltster in the region. Its multistep mash includes a single decoction, and there are three hop additions during the boil.

The high-alpha Herkules variety goes in first, providing clean bitterness with a touch of spice. That plays well with the mid- and late-boil additions of Hallertauer Mittelfrüh that add a wonderfully fresh, floral component to the beer, which—combined with a relatively dry finish—gives the beer a refreshing quality.

The Bayers get their yeast from other breweries around the region—lately they've been trying different ones—rather than propagate it themselves. Stefanie says they typically reuse the yeast for five or six generations before starting a fresh pitch.

A typical brew day starts at about 6 a.m. They brew two or three batches a week during the busy summer months, Stefanie says, but only brew once a week during the slower winter season. Unlike some breweries that rush beers in the summertime, Bayer Theinheim has the capacity to take its time—thanks to the 40-hectoliter brewhouse installed in the late 1980s and the new fermentation building directly across the street, completed a few years ago.

Stefanie says the family cares about making each batch with the same careful intention that they always have. The quality and the consistency are evident, helping to attract connoisseurs to the brewery from near and far throughout the year.

That new fermentation building owes something to the foresight of Stefanie's grandfather. Many years ago, he decided to install a single, empty pipe beneath the road in the village, "just in case we needed it in the future," Stefanie says. That pipe saved them a lot of work when it was time to install the new cellar. Today, they can easily send beer across (under) the street into the modern glycol fermentors.

Well Worth the Hike

The brewery and its restaurant are really the heart of the village; the chef is Stefanie's father, Michael Bayer. Her uncle also distills brandy on-site, made from local fruits.

Across the village, her aunt Elizabeth Oppelt runs the popular Pension Oppelt—a small inn where many visitors stay so they can fully enjoy the brewery-restaurant when not hiking the trails in the surrounding Steigerwald Nature Park.

Perfect for those hikes, the Bayers also bottle their Landbier—but you probably won't find it in Bamberg. "Bamberg has enough beer," Stefanie says, laughing. Instead, they distribute most of their beer to the northeast, toward Schweinfurt.

The pub pours the Landbier, from a tap connected to a serving tank, into steinkrugs. Locals appreciate the nod to tradition. "The *stammtisch* drink Landbier," Stefanie says, referring to the regulars who show up at the same times every week like clockwork.

About two-thirds of the brewery's production volume is Landbier. They also produce an amber lager called Knörzla, with some caramel malt and a sweeter taste than the flagship. The Bayers also keep a third tap for rotating seasonals and one-off experiments—such as an occasional doppelbock or even a rare dampfbier. "We serve them until we run out," Stefanie says, "then we have a different one."

For those smaller batches, the brewery occasionally uses hops from its own garden, which is located next to the cellar building. They mostly use those as dry hops, adding them to the lagering tanks and lending a modern twist to an otherwise traditional German brewery.

Stefanie heads toward a specific plant and plucks a mature hop cone from the bine. "This one is mine," she says. "Mandarina Bavaria." 

MAKE IT

Bayer Theinheim Landbier

Using information provided by brewers Stefanie and Helmut Bayer, we've pieced together a homebrew-scale recipe for the brewery's country lager.

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.047 (11.7°P)

FG: 1.011 (2.8°P)

IBUs: 29

ABV: 4.7%

MALT/GRAIN BILL

7 lb (3.2 kg) Bamberger Pilsner

1.75 lb (794 g) Bamberger Munich

HOPS SCHEDULE

0.4 oz (11 g) Herkules at 60 minutes [22 IBUs]

0.4 oz (11 g) Hallertauer Mittelfrüh at 30 minutes [4 IBUs]

1 oz (28 g) Hallertauer Mittelfrüh at 5 minutes [3 IBUs]

YEAST

White Labs WLP835 German X Lager, Imperial L26 Pilgrimage, or similar—or your favorite German lager strain

DIRECTIONS

Mill the grains and mash at 145°F (63°C) for 30 minutes, then raise to 154°F (68°C) and prepare for a single decoction: Transfer about one-third of the mash to a separate kettle and slowly bring to a boil. Boil the decoction for 5 minutes, then return to the main mash; raise to 167°F (75°C) and mash out. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to get about 6 gallons (23 liters) of wort. Boil for 60 minutes, adding hops according to the schedule. After the boil, chill to about 45°F (7°C), aerate the wort, and pitch a healthy yeast starter. Ferment at 45–47°F (7–8°C), or on the lower end of your chosen yeast strain's recommended range. If you have one, attach a spunding valve just before fermentation is complete to capture natural carbonation. Once primary fermentation is complete—usually within 10–14 days—gradually drop to lager temperatures, 32–37°F (0–3°C), and lager for 3–5 more weeks before serving.

BREWER'S NOTES

Malt: Bamberger Mälzerei products are not typically available outside Germany. Feel free to substitute with Weyermann, IREKS, or other quality German malts.





Von Ebert Volatile Substance

Von Ebert Brewing, Portland, Oregon

TODAY IT MAY BE one of the more recognizable IPAs in Portland, but Volatile Substance didn't exactly hit the market with a roaring start back in 2018.

"It didn't really catch on for maybe two years," says Sam Pecoraro, brewmaster at Von Ebert. "I think the key was just having it on tap all the time, pushing it, and it just kept getting better and better."

These days, Volatile Substance is considered one of the region's best-in-class IPAs, and it's got the awards to show for it—including two gold medals in 2021, at both the Great American Beer Festival and Oregon Beer Awards. Its combination of firm bitterness, resinous flavor, and hints of

tropical fruit has proven successful and enduring—though the beer has gone through several changes to get to where it is now.

The Evolution of a Pacific Northwest IPA

Pecoraro says he began to conceive the beer back in 2010, years before he started working at Von Ebert.

"At the core, I had this idea, and I wanted it to be a flagship beer somewhere," he says. "At my previous jobs, it wasn't the right fit for those breweries. I worked at Breakside, and I don't think they were in desperate need of a flagship IPA. Before that, I was at the Commons Brewery, and we didn't really make IPAs until we were basically closing our doors."

His goal was to build a beer that would become familiar to people in Portland and the wider Pacific Northwest region—a flagship that many could enjoy. To design the recipe, he began with a specific vision of how the beer would taste.

"We very rarely write with ingredients," he says. "We start with a concept and a 10,000-foot view. For this beer, it's more

about resin and mixed berries—high resin, raspberry, blueberry, moderate grapefruit, and pine, [with] low pineapple."

With that profile in mind, Pecoraro began to select hops that fit. "Through the years, it's been some combination of multiple lots of Mosaic, Simcoe, and a little bit of Columbus." Recently, he says, the beer has moved away from Simcoe and mixed in some Strata. The team still loves the Simcoe lots they're selecting, but they like them even better in combination with the Strata—alone, the Simcoe wasn't expressing enough of the full berry flavor that Pecoraro sought.

"For every hop variety, we have a target [flavor] description," he says. Von Ebert gets its Strata from Indie Hops, and Pecoraro loves the strawberry character that variety brings to the table. "At a low level, it just kind of boosts those other berry notes that we're looking for."

To incorporate Strata into such a tried-and-true beer, Pecoraro says, it took at least four trial batches. "We wanted to see what happens if the Simcoe is completely swapped, or if we use 50 percent [Strata], or different lots of each of those," he says.

The results of those trials informed Volatile Substance's current recipe, and they continue to adjust depending on hop crops and new information.

The Process Behind the Recipe

While the first-wort addition of CTZ consists of T-90 hop pellets, Pecoraro says they use quite a bit of CO₂ extract late in the boil. "We're really concentrating on pre-dry hop aroma," he says, adding that it's important to maximize the impact of the aroma at that point in the brewing process.

"We felt that T-90 wasn't quite as stable throughout fermentation." That's led to the beer also getting a mix of T-90 pellets and CO₂ extract in the whirlpool. They typically add those hops at the beginning of the whirlpool, Pecoraro says, at or below 185°F (85°C). They spin the whirlpool for about 20 minutes before fully chilling and knocking out into the fermentor.

At terminal gravity, Volatile Substance gets a significant dry-hop addition of Mosaic and Strata. "The beer goes through a pretty wicked refermentation," Pecoraro says. "Pre-dry hop, we'll hit around 4.3° Plato, and then we'll attenuate all the way down to 2.7."

The expectation of that hop creep plays a central role in the mash regime, too. Pecoraro says he mashes at a relatively high 158°F (70°C). "If we mash cooler, we'll end up drying out the beer too much, and that's when the beer is too citrus-forward for me."

The current grist is a 75/25 split of Rahr Premium Pilsner and Weyermann Vienna. Pecoraro says he's played around with different types of Vienna malts, but he keeps coming back to Weyermann. Some of the others were too bready, too sharp, or had too much of a bread-crumbs flavor, he says. Even at smaller percentages, those characteristics stand out, while the Weyermann variety is a bit softer. He also says that pushing the Vienna past 25 percent mutes the hop flavors too much.

The Rahr Pilsner, meanwhile, is part of the beer's signature character. "At the ABV we're at, it really helps boost the berry and pine," Pecoraro says. "Whenever we've pulled back on the Vienna malt, or changed out that base malt, that's the other time it's gone more citrus-forward." He says he isn't 100 percent sure why that citrus character becomes more prominent otherwise—but he theorizes it could be related to pH, flavor combination, or "addition by subtraction."

The beer's water profile leans into sulfate, with a 3:1 ratio of that to chloride. The mash target is 5.4 pH, and it's about the same for pre-boil. "We adjust with a little bit of lactic acid at the end of the boil, to target about 5.1," Pecoraro says. He suggests a 4.6 target pH for the end of fermentation.

PNW Style

All that tinkering and fine-tuning over the years has led not just to the awards, but also to sustained success for a core beer and local favorite.

Pecoraro is a bit evasive about what defines the Northwest IPA style, but he says that people generally can expect a bit more malt expression. That maltiness can then guide the amount of bitterness a brewer puts into the beer, with examples falling across the spectrum. The hops are strictly Pacific Northwest hops, in some contrast to West Coast-style IPAs, which can often include a portion of Southern Hemisphere varieties.

Naming the beer was as simple as Pecoraro loving the Violent Femmes—the song "Never Tell" includes the lyrics, "We're dealing with volatile substance..."

"I love that song," Pecoraro says. "I remember hearing 'volatile substance' and thinking it's an awesome IPA name. I think our team knows this, but I generally suck pretty bad at coming up with beer names. So, I actually had a good one [here] and held onto it." 🍺

MAKE IT

Von Ebert Volatile Substance

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.063 (15.4°P)

FG: 1.011 (2.7°P)

IBUs: 65

ABV: 6.9%

MALT/GRAIN BILL

8.9 lb (4 kg) Rahr Premium Pilsner

2.9 lb (1.3 kg) Weyermann Vienna

HOPS & ADDITIONS SCHEDULE

0.33 oz (9 g) CTZ at first wort [21 IBUs]

Yeast nutrient at 10 minutes

1 tablet Whirlfloc at 10 minutes

4 ml Mosaic CO₂ hop extract at 10 minutes [15 IBUs]

4 ml Mosaic CO₂ hop extract at 5 minutes [12 IBUs]

1.2 oz (34 g) Mosaic at whirlpool [8.5 IBUs]

1.2 oz (34 g) Mosaic at 10 minutes into the whirlpool [8.5 IBUs]

7.2 oz (204 g) Mosaic at dry hop

2.4 oz (68 g) each Simcoe, Strata, and Mosaic Cryo at dry hop

YEAST

Imperial Flagship A07

DIRECTIONS

Mill the grains and mash at 158°F (70°C) for 60 minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as necessary to get about 7 gallons (26.5 liters) of wort, depending on your evaporation rate. Boil for 60 minutes, adding hops, nutrient, and finings according to the schedule. After the boil, do a whirlpool step: Stir or recirculate to create a vortex, cooling the wort to about 185°F (85°C) if possible, and add the first whirlpool hops; after 10 minutes, add the second whirlpool hops, and allow 10 more minutes to steep and settle. Chill to about 63°F (17°C), aerate the wort, and pitch the yeast. Ferment at 65°F (18°C). When primary fermentation is complete, drop the yeast or rack to secondary and add the dry hops. Dry hop for 2 days, burping daily with CO₂ or otherwise rousing the hops, then drop or rack again. Once the beer has passed a forced diacetyl test (see "Hunting for Diacetyl," beerandbrewing.com), after about 7 days, crash, package, and carbonate to about 2.65 volumes of CO₂.

BREWER'S NOTES

Yeast nutrient: We add Yeastex and zinc at 10 minutes; follow your supplier's instructions for dosage. At that time, we also add Wyeast Brewtan B, a tannic-acid product that helps to reduce oxidation and improve clarity in the finished beer.

Hop creep: All those dry hops lead to some diastatic refermentation. We add ALDC enzyme at dry hop to help prevent diacetyl formation. It's also good practice to do a forced VDK test before crashing.

Make Your Best...

Get to the heart of every beer style, as **Josh Weikert** shares tips and philosophies for brewing the very best.

Brown IPA

IS BROWN IPA THE MOST OVERLOOKED and under-loved of all the niche IPA sub-styles? Maybe. There's also an apparent redundancy to it—after all, we already have American brown ale, which should be hop-forward. But I've come around to the idea that these are distinct beers—a good brown IPA wouldn't make a hit-the-numbers American brown ale, and vice versa. Brew yourself a couple of brown IPAs—targeting that style specifically—and you'll soon find that this isn't just an American brown ale with a little more alcohol and hops.

Style: No surprise here: Brown IPA is hop-forward. Bitterness should be medium-high to high with prominent hop aromas and flavors. And yet ... it's brown—not only in color, but also in malt character. It should have noticeable darker-malt flavors without being sweet or overly malt-forward and without clashing with that hop character. That's quite a balancing act. Grist selection is critical to hitting the right notes. The trick is in finding the right amounts and types of malt flavor without going overboard in a noisy flavor environment with plenty of hop character, bitterness, and maybe a bit of alcohol. Luckily, we have an ingredient that can help us satisfy both our malt-flavor and hops goals.

Ingredients: IPA grists are best when simple, and—despite our need for some malt character—this is no exception. We start with a base of pale two-row, adding a moderate layer of 65°L British crystal—for some nice nut-toffee background notes—a dab of chocolate rye, and a final dab of Carafa Special II.

Why that last one? First, it should bring our SRM to about 25—stately and attractive, with a dark walnut hue. Second, as an unhusked malt, it imparts some roasty flavors—cocoa, espresso bean, a bit of campfire—but *without* any husky, burnt astringency. It also curbs any roast-malt bitterness that would clash with our hops.

Have fun with the hops! Pick your favorite fruit-forward varieties, adding enough at 20 minutes left in the boil to impart about 41 IBUs. Then for flameout or whirlpool, blend an ounce of those with an ounce of Phoenix, if you can get it. Why Phoenix? Because that crazy British hop variety tends to reek of cocoa—an absurd flavor from a hop, but there it is, clear as day (and it's worth trying in all your darker, hop-forward beers). You should end up around 50 IBUs, which I find to be just right for this style.

For yeast here, I like Wyeast 1318 London Ale III—it doesn't ferment to bone-dry, helping to balance the presentation.

Process: After the boil, give your flameout/whirlpool hops a good 15 minutes to steep. Ferment relatively cool, then raise a bit to finish out the fermentation and clean up any diacetyl. A note on dry hopping: Depending on what you use, it could impart a "grassy" character that's best avoided. If you plan to enter this beer in competition, I recommend bumping up your whirlpool addition instead.

MAKE IT

Jack's Brown IPA

Over the years, this recipe has gotten a bit darker and a bit lighter in body, but the goal is the same: to shape an IPA that is distinct from stylistic "neighbors" such as American brown ale. Avoid the temptation to over-hop, and you'll get a clearer flavor presentation from every other aspect of this beer.

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.068 (16.6°P)

FG: 1.017 (4.3°P)

IBUs: 50

ABV: 6.8%

MALT/GRAIN BILL

11 lb (4.9 kg) two-row pale

1 lb (454 g) British crystal 65°L

8 oz (227 g) chocolate rye

8 oz (227 g) Carafa Special II

HOPS SCHEDULE

1.5 oz (43 g) Galaxy at 20 minutes

[41 IBUs]

1 oz (28 g) each Galaxy and Phoenix at whirlpool [9 IBUs]

YEAST

Wyeast 1318 London Ale III

DIRECTIONS

Mill the grains and mash at 152°F (67°C) for 75 minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to get about 6 gallons (23 liters) of wort, depending on your evaporation rate. Boil for 60 minutes, adding hops according to the schedule. After the boil, stir or recirculate to create a vortex, dropping the wort temperature to about 180°F (82°C) if possible; add the whirlpool hops and allow 15 minutes to settle and steep. Chill to about 65°F (18°C), aerate the wort, and pitch the yeast. Ferment at 65°F (18°C) for 7 days, then raise to 69°F (21°C) and hold there for 3–5 more days. Once fermentation is complete and gravity has stabilized, crash to 35°F (2°C) for 48 hours, to improve clarity and flavor stability, then package and carbonate to about 2.5 volumes of CO₂.



Helles

HELLES IS A CHALLENGING beer to get right—but once you dial it in, you'll have one that just about everyone likes to drink. It's simple, but simple can be surprisingly hard to get right, especially when there is nowhere for mistakes to hide. That makes Munich-style helles a real challenge—but it's one that you should embrace. If you can lock down the grist and ferment it cleanly, even your most skeptical friends will be coming back for another liter.

Style: Helles should be a showcase of pilsner malt. Easy, right? Wrong. The malt is the easy part—so what about the rest? Despite being light and pale, this beer isn't a flavor pushover. Besides the malt's bright, honey-like flavors, we should also smell some restrained Noble-hop character, reminiscent of flowers and herbs, and taste noticeable bitterness. Think medium-low bitterness, medium-low hop flavor, and a dry finish—but not *too* dry. We don't want the bite of a good German-style pilsner. This style takes finesse. It also takes trust in your recipe and your process.

Ingredients: The classic Bavarian examples rely entirely on pilsner malt—but they also typically rely on decoctions and generations-long relationships with growers and maltsters to get exactly the specs they want. We'll use a base of pilsner malt, but we'll round it out with a bit of Vienna and an even smaller bit of Victory to add a touch of richness—no more, because we want to keep it refreshing. Those additions may seem like ornamentation, but without them you'll find that the beer seems too basic and spare.

More than you'd expect, this beer also relies on hops to a remarkable degree—namely, Hallertauer Mittelfrüh, with its characteristic spicy-floral nose. While normally going for pellets, I make an exception here and go whole-leaf for a finer character—you'll notice the difference—with additions at 60 and 10 minutes to get our bitterness

and subtle flavors. You can adjust those as needed on future batches to dial in the gentle but noticeable hop character. For the yeast strain, Wyeast 2308 Munich Lager ferments a bit more fully than other strains, aiding the impression of dryness.

Process: If there's one thing that can wreck this beer, it's diacetyl. We'll start fermentation cool, at about 50°F (10°C), and ramp it up for a diacetyl rest once we're about halfway through primary (about 1.022 or so). To be sure, you can do a forced VDK test (see “Hunting for Diacetyl,” beerandbrewing.com) before cold crashing and packaging. You'll want to carbonate this to about 2.25 volumes of CO₂, erring on the high side. A lack of carbonation can really kill this beer, making it taste flabby and dull.

Ultimately, trust yourself and your process. Once you have the recipe locked in, if your process is consistent and your ingredients are fresh, you can make this beer sing on command.

A Bavarian helles is truly one of the world's great beer styles, and you'll find that it can win over the biggest doubters of pale lager, or of homebrew.



MAKE IT

One Take Helles

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.056 (13.8°P)

FG: 1.014 (3.6°P)

IBUs: 20

ABV: 5.6%

MALT/GRAIN BILL

9 lb (4.1 kg) German pilsner

1 lb (454 g) Vienna

4 oz (113 g) Victory

HOPS SCHEDULE

1.25 oz (35 g) Hallertauer Mittelfrüh at 60 minutes [17 IBUs]

0.6 oz (17 g) Hallertauer Mittelfrüh at 10 minutes [3 IBUs]

YEAST

Wyeast 2308 Munich Lager

DIRECTIONS

Mill the grains and mash at 152°F (67°C) for 75 minutes. Recirculate until the runnings are clear, then run off into kettle. Sparge and top up as needed to get about 6 gallons (23 liters) of wort, depending on your evaporation rate. Boil for 60 minutes, adding hops according to the schedule. After the boil, chill to about 48°F (9°C). Aerate the wort and pitch the yeast. Ferment at 48°F (9°C) for 14 days, then allow a rise to 60°F (16°C) and hold there for 2–3 more days. Once fermentation is complete, let it stand at room temperature (about 68°F/20°C) for 14 days, then crash to 35°F (2°C), package, and carbonate to about 2.25–2.5 volumes of CO₂.

BREWER'S NOTES

The purists may hate me for it, but I've really come to appreciate the Vienna and Victory in this “pils malt showcase.” If I use *only* pilsner, the beer comes off as a bit thin and boring. This beer is also a good candidate for a forced diacetyl test: Before crashing, pull a sample and microwave briefly (10–12 seconds) and smell for butter, toffee, or however diacetyl presents to you. If it's there, give it more time.

GEARHEAD

Smoke on the Horizon

Craft maltsters are sending up signals for a new trend, producing small batches of unusual smoked malts made with a variety of woods. Brewers dig it, too—but will drinkers follow? **By John M. Verive**

BEER IS ELEMENTAL—an alchemical medley of water, fire, earth, and air that transforms simple raw materials into a complex brew both flavorful and intoxicating.

To carry this metaphor further, the grains and hops represent the earth from which they sprout. The water element is self-evident—not only as a major ingredient, but also as a vital part of the malting process. Fire brings it all together in the kettle, converting disparate elements into a unified solution. That leaves yeast, of course. While that final ingredient represents the air from whence it came, there's another aspect of the air element that can have an outsized impact on beer's flavor: smoke.

Smoke was once almost inescapable in brewing. Barley's germination needs to be halted at the right moment to maximize the malt's fermentability. Historically, a wood-fired kiln was often what dried the grain and stopped the germination—but it also introduced at least *some* smoky flavor to the equation. As the art of brewing veered further into a science and brewers optimized their processes for industrial production, they also tuned out the smoky flavors of malt.

There are still iconic producers of smoky beer today, but smoked beer is more than the rauchbier of Bamberg, the grodziskie of Poland, or even the smoked porter of Alaska. After years of exploring new hops, hopping techniques, ever-growing hop doses, flavorful adulterants of the

sort usually seen in pastry cases and cereal aisles, mixed cultures, and enough fruit to strain Carmen Miranda's neck, craft brewers are looking for the next lightning-in-a-bottle trend.

Some are even trying to capture smoke in a bottle.

Smoking Hot or Keeping Cool?

As the smoked beers of Upper Franconia are often held up as the exemplars, let's look at what makes them so iconic: It's the malt.

In Bamberg, Schlenkerla malts its barley in house, kiln-drying it over a beechwood fire. The beech smoke is a feature—it imparts a clean, round smoke character—and the moist malt absorbs that smoke as it dries, saturating the finished lager.

The first sip of a great rauchbier is an experience that makes a lasting memory. The reaction can be visceral, and your first impulse may be to reject the dissonant flavor that's more expected in a slab of ham than a glass of brown or coppery lager. The magic of Bamberg rauchbier, however, is how it ingratiates itself to your palate if given the chance. Your first glass may water the eyes—but by the bottom of your second, you've adjusted to the impact. The careful balance of soft malt and Noble-hop zing rings through what was once a deafening roar of smoke, demonstrating how it can harmonize with them. Sure, there's dissonance, but—like jazz—that's where the magic happens.

Hot-smoking malt is effective and efficient, but it doesn't work as well if the malt is already kilned; the higher temperatures can destroy all those enzymes that the maltster worked so hard to cultivate, besides causing other flavor changes. It's much more straightforward to treat finished malt with cold smoke, removing it from the fire's heat. (Consider the delicate smokiness of lox compared to the bold flavor of barbecued ribs.) While cold-smoking is less intense, it does allow for more control over the process—and a subtle finished product.

Cold-smoking finished malt is the most common method employed by smaller American maltsters who offer smoked products or at the few breweries that smoke their own malts. At Riverbend Malt House in Asheville, North Carolina, VP of engineering and production Adam Demchak sums up how they developed their process: "Trial and error," he says, "and a lot of iterating in our first smokehouse."

That first smokehouse began as an off-the-shelf metal toolshed kit that Demchak built near the malthouse. "We built that first setup with a McMaster-Carr catalog and a lot of trips to Home Depot," he says. He added a jury-rigged smoker attachment from a propane grill, and the experiments began. The firebox generates smoke, which flows into a sealed smoke chamber with a small fan. Inside the chamber, the smoke flows through the kiln-dried malt, spread on mesh screens. About eight hours is enough to sufficiently flavor a 500-pound batch.

They played with different types of wood, different types of malt, and every other variable they could think of before evaluating the results. After many test batches, they landed on a handful of combinations of variables they liked enough to give to the sales team.

"It's a unique product, and it's not for everybody," Demchak says. He adds that it wasn't brewers who were driving the demand for smoked malts—instead, it was distillers.

"Smoked beers are not cool, but 10 years ago, nobody was making craft lager. Now look."

At Ranger Creek, a smoker built from a 20-foot shipping container now produces 800 lb batches of malt.



Hot-Side Addition: Fort Point Manzanita

San Francisco's Fort Point Beer uses an interesting and more direct way of getting smoky flavors into their fan-favorite seasonal, Manzanita.

Besides traditional beechwood-smoked malt from Weyermann, the altbier gets some malt smoked with local manzanita wood to capture the fragrant, incense-like aroma of the native California shrub.

While the initial idea was to add manzanita chips to the kettle, the wood didn't have much impact. "There's not much flavor in the wood," says Mike Schnebeck, Fort Point's director of innovation. "Unless you light it on fire."

That's just what they did for the first Manzanita brew day. Tossing a half-dozen "arm-sized" smoldering logs into the boil kettle bestowed the elusive manzanita aroma into the amber brew. "It is subtle, but you can taste it," Schnebeck says. "It is cedar-like and complements the beechwood smoke."

The beer is quaffable and transportive—especially for this California native, who grew up hiking and camping in the manzanita-covered chaparral hillsides. "It's got a good story," Schnebeck says, "and it's a fun brew day."

Where There's Smoke, There's Flavor

When I ask about smoked beer, I hear that same "it's not for everyone" qualifier from many brewers and maltsters. The smoke-forward styles are polarizing and not exactly approachable for the craft-curious drinker.

In the world of whiskey, however, smoke is more conventional. The phenolic twang of Islay Scotch is the most iconic example. But with the boom in new American whiskey producers, maltsters are using everything from mesquite to hickory to domestic Texas peat to flavor their products.

"Distilleries eat a lot more malt than breweries do," Demchak says. That hunger for unique malt expressions fuels a lot of smokehouse fires. When Riverbend received an order for 25,000 pounds of smoked malt from a distillery customer, they realized it would take about 50 days of continuous operation on their existing smoker to fill the order.

Demchak took what he learned building the first smoker and converted a 20-foot shipping container into the 2.0 version; it can smoke up to 4,000 pounds of malt at a time. That jump in capacity allows Riverbend to offer a pecan wood-smoked



Ranger Creek doesn't want the wood to flame; they just want clean, cold smoke

red wheat malt year-round. They still run the smaller smokehouse to fill special orders with low 100-pound minimums.

At Ranger Creek Brewery & Distillery in San Antonio, you can taste the synergy of brewing and distilling—they make both beer and whiskey with malt they smoke in house. Operations manager TJ Miller says his appreciation of German rauchbier and smoky Scotch led to early experiments in smoking malt with mesquite wood in a small backyard smoker. The results were promising, and they eventually turned a 20-foot shipping container into a smokehouse capable of 800-pound batches.

As you might expect from a Texas operation, they are as serious about their smoke as any barbecue pitmaster, and the folksy wisdom of the local barbecue culture informed early decisions.

"There's a night-and-day difference between buying smoked malt and making it ourselves," Miller says. Not only is there more control over the variables of contact time and wood choice, but there's also more control over the fire itself. "We don't want the wood to flame; we want that light smoke that's clean," he says.

However, where mesquite and pecan woods reign in the local barbecue, Ranger

Creek isn't beholden to those constraints. They try everything from mulberry to applewood and other botanicals.

"Different woodsmokes hit the palate differently," Miller says. "Sometimes you want it to just taste smoky; sometimes you want more than that. But our goal is always balance."

A Rauch Revolution?

Barbecue pitmasters are wise in their ways, but as with any regional cultural practice, there is no consensus on the best way to smoke a brisket or a pork shoulder. Likewise, there's more than one established method for smoking malt.

Take Epiphany Craft Malt in Durham, North Carolina. Established in 2015 by Sebastian Wolfrum—who brewed at Ayinger in Munich before immigrating to the United States—the idea was to give local breweries access to the kinds of beer-focused maltings that German brewers can access.

"Serious beer needs serious malt," Wolfrum says. "Lager beer is serious beer, and making malt as characterful as German and Czech malts motivates me."

Epiphany's malthouse is a combination germination bed and kiln system, allow-

ing for comparatively large batches of base-malt production. But to achieve his goals of “serious” small-batch malt made from local grains, Wolfrum had to make the specialty malts that brewers demand. Focusing first on chocolate malt, he turned to an oversized, secondhand coffee roaster. Capable of 300-pound batches, the unit was too large for the third-wave, gourmet coffee roasters, but it was just the right size for a few bags of malt.

“We also wanted to offer smoked malt but found using trays of malt in a box smoker cumbersome and inefficient,” he says. So, he designed a smoke-box attachment for the drum roaster. “Traditionally, malt is smoked during kilning, while it’s wet. Smoke doesn’t stick to dry malt as well.”

To overcome this limitation, Wolfrum uses the drum roaster’s integrated water sprayer—usually used to prevent a fire in there—to keep the kernels moist during their two hours under smoke.

Epiphany doesn’t offer any smoked malts regularly, but it works with brewers on demand to make small batches of specialty smoked malts. Meanwhile, Wolfrum is watching the rise of craft lager at smaller, independent breweries.

“There’s a revolution in brewing happening,” he says, “and I want there to be a revolution in ingredients to support that brewing.”

Smoky Show & Tell

A day’s drive from the Carolina maltsters, among the wheat and soy fields of central Indiana, Sugar Creek Malt also is turning local grain into craft-friendly malts.

Caleb Michalke founded the maltings in 2015 on the family farm. He says he’s driven by history, and he wants to reconnect ingredients with the stories of the past. For example: One of the first challenges he faced was that the commodity barley varieties don’t grow well in the specific microclimate of Lebanon, Indiana. It took trial and error, and diving into the history of barley cultivation in America, to find a type that would perform on the farm—an heirloom cultivar first grown in the 19th century.

“Storytelling is a huge part of what we do,” Michalke says.

A couple years after getting the malt-house up and running, Michalke added a smokehouse for cold-smoking base malts for his distillery customers. The offerings were popular, and Michalke experimented with different woods as well as other botanicals, including hops and lavender.

“We mist the kilned malt with water and give it six or eight hours of smoke contact,” he says. The results are a clean, mild smoke character, no matter what smoke source they use. “You can use our cold-smoked malt as 100 percent of the grain bill.”

“[The lavender-smoked malt] is amazing,” says Patrick Chavanelle, senior R&D brewer at Allagash in Portland, Maine. “It’s pleasant and herbaceous and not overpowering. It plays well with our house yeast strain.” Allagash features that malt in several small-batch beers in its tasting room; it’s also one of Sugar Creek’s most popular smoked offerings.

At Sugar Creek, however, cold-smoking isn’t the only method. In 2019, Michalke built a traditional Norwegian-style *sånnhaus* on the farm. (See “The Cult of the Kiln,” beerandbrewing.com.) That old-fashioned malthouse allows Michalke to malt and kiln barley over a fire—alderwood, typically. The green malt gets about 15 hours of smoke contact—the fire needs stoking every 15 minutes—and there’s an intensity of smoke and flavor development that sets the finished product apart from cold-smoked malts. The smoky scent of Sugar Creek’s Stjørdal malt is perceptible even when it’s only a few percent of the beer’s grist.

“There’s some mystery and romance to it,” Michalke says. He wants the Scandinavian traditions to spur the creativity of brewers, and he wants the industry to view malt as more than a commodity. Might malt-forward be the next exciting trend in craft?

“Look, smoked beers are not cool,” he says, “but 10 years ago, nobody was making craft lager. Now look.”

Smoke in Your Eyes

I don’t think smoked beer is going to be the next hype-wave that fills tasting rooms and launches 1,000 memes. But perhaps smoke can become a more accepted component in craft beer—in styles both traditional and innovative.

The elusive yet intense influence of smoke can be a love-it-or-hate-it flavor—but it’s also one that takes deep root in the gustatory cortex of the unsuspecting drinker, growing into an appreciation, then a preference, and soon a craving for the primal sensory explosion that we call “smoky.” This is neither the ashy taste of tobacco nor the acrid whiff of burnt toast—this is the clean, sharp scent of woodsmoke, which transports us from our climate-controlled buildings and fast fashion to the safety of the cave and the promise of warmth—and perhaps a high-protein meal—that our Stone Age forbearers enjoyed.

Brewers are used to ingredients that come with hard data. The alpha-acid content or terpene profiles of hops, the extract percentages or friability of malt, the yeast viability—these are all hard numbers that brewers can plug into their equations.

Yet, as Michalke says, there’s romance and mystery in smoke. There’s something

Homebrewed Tips

There are more smoked malts available commercially to homebrewers than ever, but it can be hard to dial in a batch of smoked beer without a ton of trial and error. Here are five tips from brewers and maltsters for making smoked beers and not ending up with a ham-bomb keg.

- Cold-smoking your own base malt—or even specialty malts—is straightforward, and you can do it in any smoker. Spread the malt on sheet pans in a thin enough layer to get good contact with the smoke, keeping contact times to a couple of hours at first. You can mist the malt with water before showing it the smoke, to increase adhesion, and nearly any woodsmoke is fair game—but stay away from softwoods such as pine, or any processed lumber.
- Let your home-smoked malt rest for a couple of days before milling. A little time will mellow the harsher edges and marry the flavors.
- “Smoke starts in the wood, so start with good wood,” says Riverbend Malting’s Adam Demchak. When in doubt, talk to your area’s barbecue nerds about what good wood is available—but don’t be afraid to branch out from the typical fruit woods and hickories that pitmasters prefer.
- Whether you’re working with off-the-shelf smoked malts or firing up the backyard smoker for a little DIY, do some sensory evaluation of the malt before finalizing your grain bill. Chomping a handful of smoked kernels is a good start, Demchak says—but even better is the hot-steep method used for malt evaluation. To do that, make a malt tea by steeping a couple of ounces of milled kernels in a pint of 145°F (63°C) water for about 10 minutes. Smell and taste the mini-mash, and you’ll get a preview of the finished beer’s smoky character. Allagash senior R&D brewer Patrick Chavanelle also suggests making a mini-mash with a similar ratio to your recipe’s grain bill, so you can get a sense of how smaller percentages of smoked malt will smell and taste in the beer.
- A restrained touch is usually best, but Dusan Kwiatkowski—head brewer at Austin smoked-beer specialists Live Oak Brewing—cautions against being too restrained. “Too faintly smoky, and it comes off more like an off-flavor,” he says. “If you serve someone a smoked beer, you want them to taste the smoke.”

unquantifiable in its influence on malt and finished beer. Smoke is ephemeral and elusive, and the only way to analyze it is with our senses. There’s a magical tension between the data and the feeling, and brewers who leverage that tension can make some truly compelling beer.



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Big barleywines built for the barrel or sessionable stouts that satisfy? Lush layers of dense darkness or lean into local grains for the grist? The permutations are infinite. Which malternate reality will you choose?

The Expanding Maltiverse!

FLAVOR FEVER

Kernel Knowledge: Get to Know Your Malts More Intimately

From chomping on grains to hot steeps and running the grains through an espresso machine, **Randy Mosher** offers some simple tips and tricks to better evaluate your malt—and to improve your flavor imagination.

WHETHER THEY REALIZE IT or not, everyone who creates flavorful products keeps a mental model of every ingredient and process they use. This is what allows chefs, brewers, and others to do a kind of mental prototyping—visualizing the completed creation—and quickly imagine different options until they find the perfect combination.

Then it's simply a matter of writing it down and, oh yeah, actually making it.

Modern science has demonstrated that it's not only possible for humans to imagine flavors, it's indispensable for certain pursuits, including ours. It turns out that imagining an aroma actually activates the brain in a pattern similar to experiencing it in real life. Not everyone is equally good at this; most people don't even realize it's possible. But it can be learned.

An important thing to know is that this kind of flavor visualization depends heavily on the quality of the model we maintain.

PHOTOS: MATT GRAVES/WWW.MGRAPESPHOTO.COM



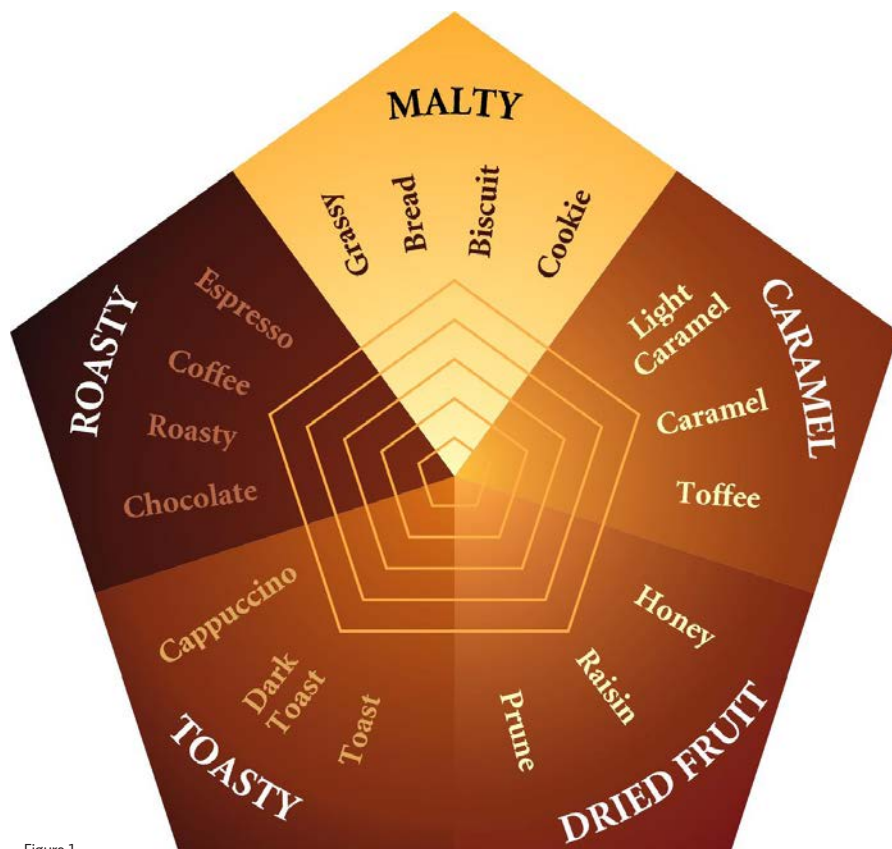


Figure 1

To be accurate and detailed, our model needs information. Constant tasting—of everything—is the way we do this. The best brewers I know make this a habit, and it shows in their beers.

So, when it comes to malts, it would be easy to lump them all together into categories, such as black or 60° Lovibond caramel. Unfortunately, each producer's version is different—often strikingly so—even at the same color level. Maltsters are a tricky and secretive bunch, and they have numerous levers they can pull to achieve different results by manipulating the Maillard browning and caramelization processes.

Hence, there really is no substitute for getting up close and personal with as many different malts as you can. At working breweries, team sensory notes on various malts should be just one more

tool for the development of the next fabulous beer.

Evaluating Malt

The simplest way to evaluate all but the darkest malts is to just chew on them.

Human saliva contains a lot of amylase enzymes, a relatively recent evolutionary adaptation to our starchy agricultural diets. As these enzymes liquify the starch and turn it into sugar, aroma compounds volatilize. Because that happens inside the mouth, pay special attention to *retronasal*—the odor perception that occurs when you breathe gently out your nose after swallowing food or drink.

Even with this simple method, you can learn a lot. The differences between caramel (or crystal) malts can be especially vivid, even for similarly colored ones from

different maltsters. Whatever method you use, be sure to record your impressions. You can use a full tasting sheet or just a blank sheet of paper and focus only on the malt aromatics. A vocabulary prompt such as a flavor wheel is helpful; you can also use the ones formatted like radar or spider charts (see Figure 1) to record intensities of attributes by putting a dot on one of the inner polygons, then connecting the dots when you're done.

Depending on the proficiency of your panelists, a tool like the wheel in Figure 2 from Weyermann Malting offers more detail.

Making and Tasting Malt Teas

While you can learn a lot by simply chewing on malt, trying this with the darkest varieties is pretty unpleasant. It's much better to taste them in a liquid form—and if you can get test extracts from malts into an actual beer, so much the better.

Cassie Poirier at Briess Malt first developed the procedure known as the hot-steep method in 2015, and the American Society of Brewing Chemists later codified it. In essence, you crush the malt, mix it with mash-hot water, rest it 15 minutes, filter it out, and cool it. Then you taste the resulting liquid, without adding it to a beer.

- The official procedure for base malt calls for 50 grams (1.8 ounces) ground into a coarse flour in a coffee mill.
- For specialty (nonroasted) malts, the recommendation is to mix 25 grams (0.9 ounces) each of pale/lager malt and the specialty malt.
- For dark-roasted malts, the suggestion is to mix 7.5 grams (0.25 ounces) of dark malt with 42.5 grams (1.5 ounces) of base malt—a ratio of about 1:6.

Burr grinders are the most consistent, but blade grinders work fine—just be sure to count out the same number of seconds for each batch. Also be careful to avoid cross-contam-

Each producer's version is different—often strikingly so—even at the same color level. Maltsters are a tricky and secretive bunch, and they have numerous levers they can pull to achieve different results by manipulating the Maillard browning and caramelization processes.



ination from one malt to the next. Go from light to dark, and if you really need to clean out the mill, grind up some white rice.

Mix the ground malt with 450 milliliters (15 fluid ounces) of distilled water at 149°F (65°C), or a little higher. This results in a ratio of 1:5 by weight, so scale that up and down as you please. After a 15-minute rest, filter the liquid through a paper lab filter or coffee filter. After cooling, evaluate the liquid by smelling and sipping it.

I've found it easier to make sense of these extracts in their normal context: beer. I use a modified procedure with a 1:2 ratio of malt to water, which results in a much more concentrated wort. You can then add this as a spike to a neutral beer, such as a pale lager. This method isn't all that revealing for very pale malts, but for darker ones—especially crystal/caramel and roasted types—it delivers a realistic sense of how each malt would work in a beer. I generally used around 1 milliliter of this concentrated wort per 100 milliliters (3.4 fluid ounces) of beer, approximating a bit more than a typical usage rate for dark malts in a beer. Experiment with the spike quantity to suit your taste and what you're trying to achieve.

It is possible to do any of these micro-mashes with a sous vide circulator, which works especially well when doing a bunch of samples at the same time. I've found that with more than a handful, it's hard to time things so that each little mash gets exactly the same soaking time, introducing some variability. By loading up all your malts and room-temperature water in little pouches, sealing them—not under a vacuum, obviously—then putting them in a preheated bath, they all get the same treatment. Fifteen minutes after the bath comes back up to temperature, dump the water, and add cold water and ice. These chilled micro-mashes are stable and can sit until you filter them.

I like to cut down pre-made sous vide bags, so they hold just the right amount of grain and water. I find that making them tallish and keeping them standing up when chilling allows them to settle a little before filtering. It's always easiest if you run the clearest portion through the filter first, then dump in the slurry when it's still fluid enough to do so.

Coffee filters work fine, but lab filter paper may catch more solids. With a V-type filter, a pour-over coffee filter holder works great. Whatever funnel you use, make sure it has little ribs

FIVE ON FIVE

Stout

From sessionable milk stout to silky barrel-aged sippers, here are five brewer favorites certain to satisfy.



Blackstone Black Belle Barrel-Aged Imperial Stout

Spencer Longhurst, head brewer for Barrique Brewing & Blending in Nashville, Tennessee

"Once a year, Blackstone teams up with our local Nelson's Green Brier Distillery to release Black Belle, with a rich bouquet of dark-roast coffee, bittersweet chocolate, and a subtle hint of toffee. The integrated essence of bourbon barrels lingers in the background, with a perfect balance of malt, oak, and time. Complex flavors, luxurious mouthfeel, and the influence of fresh local barrels—it's old school, no frills, no adjuncts, just barrel-aged imperial stout."



Phase Three Eunoia Batch 15

James Herrholz, chief creative officer for Corporate Ladder Brewing in Florida and North Carolina

"It's a master class in blending, built on a rich foundation of imperial stout aged for an average of 20 months in a mix of bourbon barrels. The interplay of Maris Otter malt with carefully selected adjuncts—caramel, Saigon cinnamon, Madagascar vanilla, and Ghana cocoa nibs—enhances the beer's deep caramelized sweetness, subtle spice, and decadent chocolate notes. The result is an indulgent, velvety-smooth experience that drinks like an ooey-gooey glob of bourbon-soaked caramel and chocolate."



Half Acre Chocolate Camaro

Jude La Rose, cofounder, Hop Butcher for the World in Chicago

"When I sit in a taproom with a full nonic pint, this quintessential silky-smooth milk stout makes me feel it's exactly where I'm supposed to be. Liquid chocolate and roast are boosted by cocoa nibs, while a classically refined milk-sugar addition rounds out the body. It's like making an easy left turn along a curved road."



Seven Island DoomBringer (in collaboration with Burial)

Greg Ziemian, cofounder & CEO, Browar Stu Mostow in Wroclaw, Poland

"My two favorite things in imperial stouts—vanilla and bourbon—are at their best here. The nose is well balanced with sweet vanilla and bourbon undertones as well as rich maple syrup and hints of dark chocolate. The mouthfeel is very thick and smooth with moderate carbonation, which enhances the creamy texture. Complex yet drinkable for the caliber."



Perennial Sump

Sean Buchan, cofounder, Cerebral Brewing in Denver

"I'm a big coffee nerd, and Sump from Perennial Artisan Ales is one of my favorite imperial stouts. They do such a great job highlighting single-origin coffee varieties in a way that seamlessly blends with the base beer—a trick that can be much harder than it looks. It's not a style I reach for on a regular basis, but when I do, I know Sump will deliver that decadent hit of caffeine, roast, and chocolate fudge I'm craving."

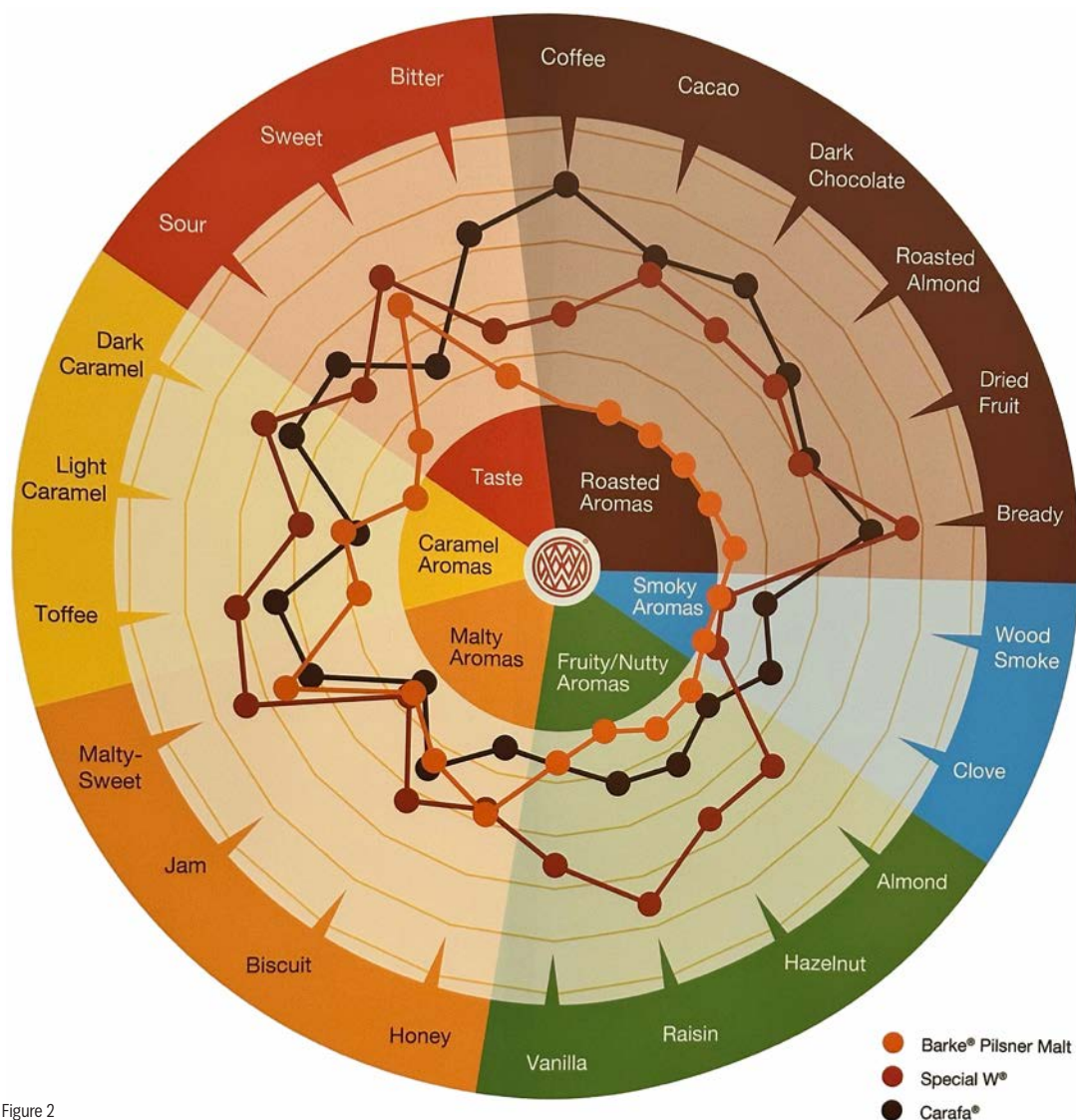


Figure 2

that allow the draining liquid to flow downward. If you have access to some fine stainless-steel or nylon mesh (a paint filter should work), make a pre-filter cone and set it right on top of the paper one. That will hold back some of the solids and make for faster draining. With larger batches, I'd recommend laboratory vacuum filtration, as it's a lot faster.

For all extraction methods, after extracting and filtering, let the liquid stand for half an hour or more, then decant and leave the remaining sludge behind.

More Malt Hacks

What I've described above are simply tiny, short mashes. Even at just 15 minutes, they still convert a fair amount of starch, which works with paler malts. Because not all malts really need mashing to release color, flavor, and aromatics, quicker methods can be useful, especially with crystal/caramel and roasted malts.

While it might seem like an odd idea, an espresso machine does with coffee pretty much what we're looking for with malt: It extracts flavor and color while leaving the solids behind. A single-shot espresso starts with seven to nine grams of coffee, so the samples are small. But, like my 1:2 ratio above, an espresso

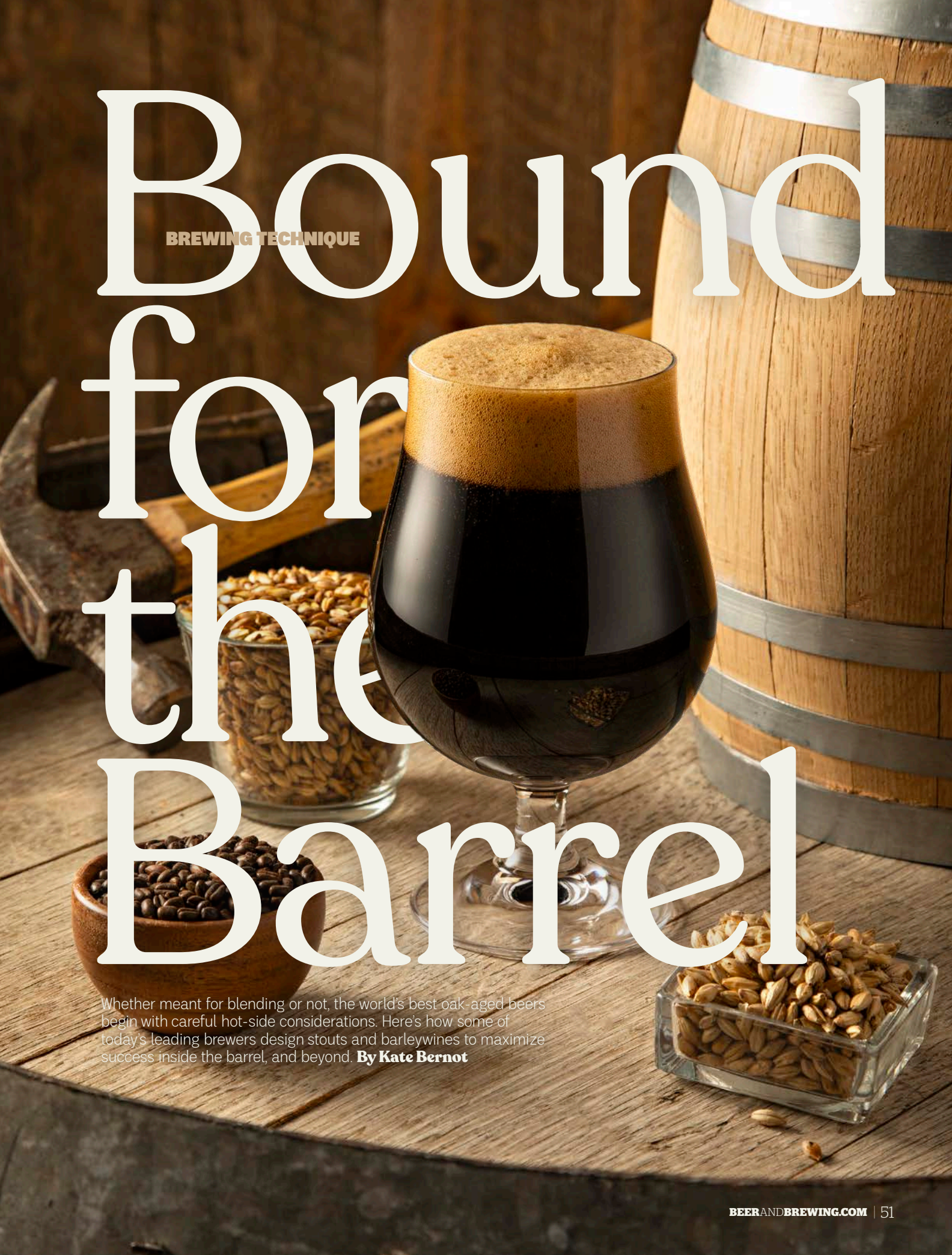
machine creates a strong malt extract that can easily flavor a pint or two of beer. Drip filtering can test your patience; this method bypasses it with brute force.

While these techniques are mainly meant for sensory evaluation, they can also be used in recipe development and tabletop prototyping. It's even possible to prototype grain bills, to some extent, either by blending different amounts of these micro-mashes or by test-mashing a proposed grain bill. If you want to scale it up to a full recipe, it's important to be accurate in your measurements and notes. With a particular ratio of malt to water, and an amount of the resulting test extract added to a beer, it should be possible to simply do the math to figure out the equivalent amount of malt(s) in the full-scale recipe.

It's also easy to experiment with techniques such as cold-soaking, which can produce—as with cold-brew coffee—smoother and less pungent results. Scaling up to a brew, these cold infusions can be filtered and added at flame-out.

Because brewing can be cumbersome and slow, it's great to taste quickly through a lot of options, making better beer, and—as a bonus—building a more capable model in your head.





Bound for the Barrel

BREWING TECHNIQUE

Whether meant for blending or not, the world's best oak-aged beers begin with careful hot-side considerations. Here's how some of today's leading brewers design stouts and barleywines to maximize success inside the barrel, and beyond. **By Kate Bernot**

Clockwise from top:
Filling a barrel at Half Acre;
a barrel stack at Revolution;
pulling a blending sample of
barleywine at River North

BREWERS’ “SET IT AND FORGET IT” approach to barrel-aging beers is in the rearview. Today, the best practitioners of the art aim for ever-greater precision—even while acknowledging that total control is impossible.

This shift reflects wisdom won over time: In its modern commercial incarnation, barrel-aged beer is now about 30 years old. Three decades of beautiful successes (and undrinkable failures) have provided countless lessons on how to manipulate variables in the production of stout, barleywine, and other strong beers meant for the wood.

Yet no step is more critical than the first: designing and brewing the beer that’s bound for those barrels. Methods to produce it vary, but virtually every stand-out barrel-aged beer begins with *intention*.

“When we’re designing the recipe, we’re imagining where the beer is going later,” says Mike Lukacina, founder of Magnanimous Brewing in Tampa, Florida. “We design them for barrels.”

This approach accounts for the characteristics of specific barrels, how long the beer is likely to age, whether adjuncts will be added (and how much), the potential for blending, and more. It even includes a degree of consumer expectation: Are palates shifting to prefer slightly more roast? Or is this a “festival beer” best consumed in three-ounce pours?

Increasingly, brewers are answering these questions before they even brew a batch, let alone rack it into barrels.

Building Barrel Components

Many breweries’ stouts or barleywines—even if destined for wood—can be consumed fresh, and they may be delicious that way. However, for brewers focused on producing beer for barrel-aging and blending, that’s often not the case.

At Chicago’s Revolution Brewing, barrel program manager Marty Scott says the barleywines and stouts that eventually become the Deth and Straightjacket series of beers would never be released before aging in the barrel.

“Because we do everything via blending now, we don’t have a standalone recipe that we put into the barrels, twiddle our thumbs, and then pull out,” Scott says. Today, Revolution brews its stouts and barleywines meant for barrels in two distinct recipes: “sweet” and “dry” versions. Customers won’t get a chance to drink these

individual beers on their own; instead, they’re designed to interact with barrels in different ways, contributing varied aromas, flavors, textures, and alcohol levels to a final blend. Scott says he’s fortunate to have a library of up to 1,500 barrels from which to select, but he’s adamant that brewers don’t need volume to achieve barrel-aging success—they only need a plan.

“You don’t need an inventory of 1,500 barrels to take control back and to have a thoughtful blending regimen,” Scott says. “Once you have space for two batches of barrels, you can start playing around with these various components. The smaller the brew-house size and the more room you have to store, the more opportunity it gives you to do this kind of component production and blending.”

In Lafayette, Colorado, Westbound & Down uses a related approach for its barrel-aged stouts. The bulk of the final blends comes from Absence, a classic, roast-forward imperial stout full of chocolate and coffee notes. Supplementing that beer are two components that the brewery doesn’t release commercially on their own. One, known internally as Cookie, is a 30°P (1.129) oatmeal imperial stout that adds massive brown sugar and baking flavors. The other is a lower-roast imperial stout of 35°P (1.154) that delivers huge sweetness and body. (The team referred to this one initially as Big Softy before switching its name to Abundance—together, the two names provide a solid overview of this beer’s characteristics.)

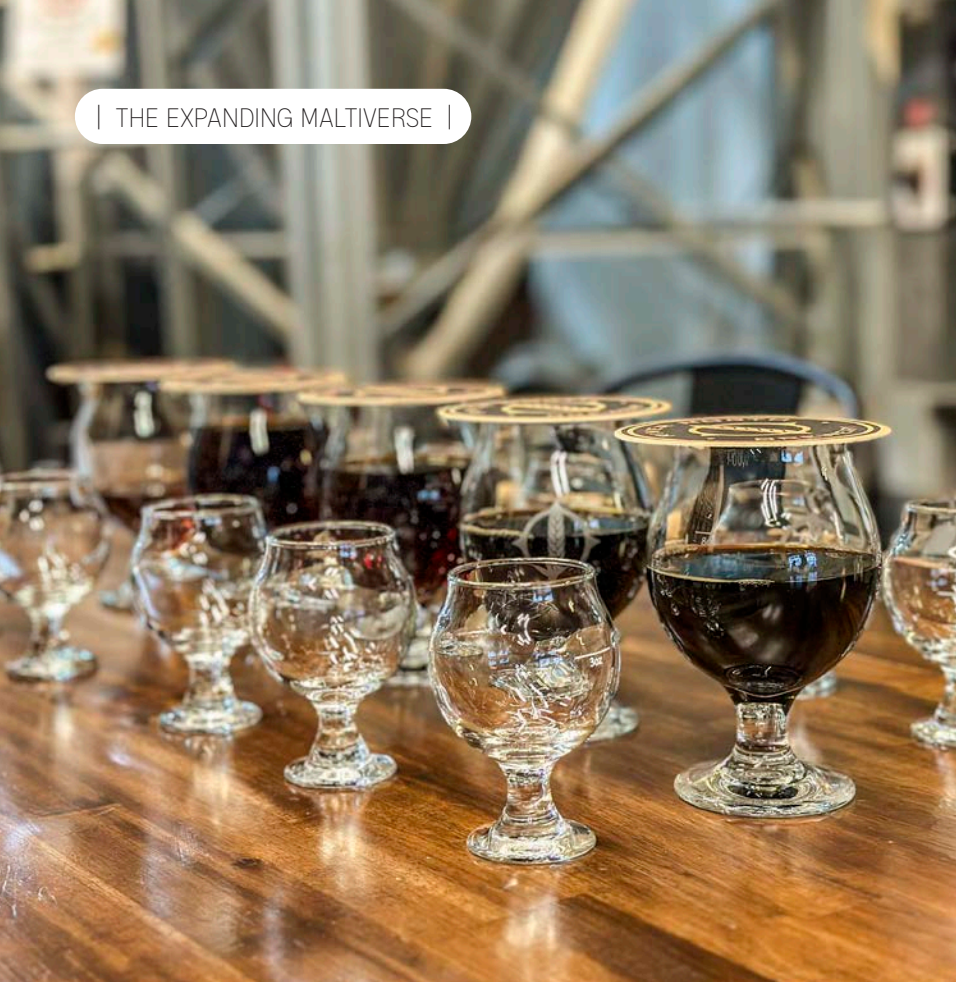
Those two components exist only to contribute to Westbound & Down’s final barrel-aged blends. Abundance, in particular, can absorb an intense level of oak sap—on par with Louie, the brewery’s English-style barleywine—without pushing the overall blend out of stout territory and into the realm of strong ales. On its own and without adjuncts, however, Abundance makes little sense.

“We basically make it as a jet-black barleywine,” says Jake Gardner, director of brewing operations. “It’s no longer barleywine because to get it jet black, you have to use enough dark malt that it’s [stylistically] in no-man’s-land.”

However, what may be confusing or disappointing on its own plays a pivotal role as a minor component in Westbound & Down’s anniversary beers, including 5 Years Strong—one of *Craft Beer & Brewing Magazine*’s Best 20 Beers in 2021.

PHOTOS, CLOCKWISE FROM TOP: COURTESY HALF ACRE; COURTESY REVOLUTION; COURTESY RIVER NORTH





The Sugars Have It

It was a brewer's mistake almost a decade ago that taught Revolution the power of component blending.

That brewer left a steam jacket on while mashing in, resulting in a wildly under-attenuated barleywine. Unblended, it was overly sweet, so the team brewed a deliberately dry batch to blend with it, allowing them to hit their target sugar and alcohol levels in the final beer.

After they aged both components in barrels for a year, the final blend was a success. Even more valuable, the remaining barrels of those sweet and dry components yielded a critical lesson after resting for another year: The aging process had acted differently on the two versions, producing marked changes in color, aroma, and texture in the sweet barleywine but relatively little change in the drier one.

Scott and his team connected the dots: It was the sugars within the beer that were most reactive to the aging process, not the liquid itself. (It's a process Scott refers to as "dynamic aging.") Over the years, that conclusion has guided Revolution's blending process, which today generally involves a 60/40 or 50/50 blend of sweet to dry barleywine—with the sweeter one aged anywhere from 12 to 40-plus months, and the drier one for only six.

Though much of Revolution's blended barleywines are made of young beer, the concentrated sugars in the sweeter component have essentially been "super aged," resulting in a complex final mélange. "It winds up tasting like it's a two- or three-year-old beer, but you could have 40 or 50 percent of that blend that's only six months old," Scott says. "We call it 'barrel-stack optimization'—we can get a lot more liquid through the barrel stacks and have the same malt complexity value, or malt oxidative value. It ends up tasting really fucking old."

The Westbound & Down team discovered the power of sugars in a related way: They were struck by how much more barrel character barleywines expressed compared to stouts. They figured that some of that had to do with barleywines' higher gravity and higher sugar concentration, as they're mostly made of Golden Promise or Maris Otter malts compared to stouts' inclusion of roasted, dark, and caramel malts.

Again, Scott emphasizes that a brewery doesn't need hundreds of barrels to try out this kind of blending—it needs only two. Blending also offers greater control and flexibility, he says, because brewers can use the components to adjust the blend for dryness and roast versus sweetness and viscosity—to their own taste, or that of their customers.



The more contrast between the two base recipes, Scott says, the greater the range of flavors and textures that are possible in the final blend.

Not Blended, But Intended

Most small breweries that produce barrel-aged beers aren't blending components the way Revolution and Westbound & Down are. Many of the most successful ones, however, *are* adjusting their approaches to maximize a beer's chance of success in the barrel, employing long boils, double mashes, and various sugars to beef up a beer bound for wood.

The Big Friendly in Oklahoma City adjusts its stout recipes and brewing processes depending on the target flavor profile after barrel-aging. If the goal is for the barrel to amplify caramel and vanilla notes, the brewers lean more heavily on debittered black malt as a portion of the grain bill. Or, if the brewers plan to use a flavor adjunct that they expect to marry seamlessly with roastier notes—such as coconut—they'll bump the roasted barley up to half or even 60 percent of the stout's specialty malts.

"It's minor changes that make a big difference," says Joe Quinlin, the brewery's cofounder. The Big Friendly's barrel program is small. With only five to seven barrels filled at a time, and with a recent shift to using only one adjunct at a time—if any—the team doesn't have a lot of room for imperfections.

Success starts with a base beer engineered specifically for wood. "It's been a move back to simplicity and focusing on building a beer's flavor and how it can complement the barrel," Quinlin says.

The malt bill is also a primary focus at River North in Denver. In recent years, head brewer Matt Malloy has cut out black patent and heavily roasted malts entirely; he found that years in a barrel tended to amplify their astringency. Instead, he's using higher percentages of lighter-roasted malts to achieve the desired color and roast character. He's also increased final mash temperatures to 154–156°F (68–69°C) to extract less-fermentable sugars, aiming for a more substantial base that can withstand some thinning over its year or two in a barrel.

Intentionality is also the guiding principle at Chicago's Half Acre. That's especially true of Benthic, the annual barrel-aged, coffee-coconut stout that makes up most of its barrel-aged production. Senior R&D manager Ryan O'Doherty says that Benthic's consistency and quality have improved over the years, thanks to more precise control of hot-side processes.

"It's making sure that we're not just like, 'Let's see how this brew day goes, and if we're at 35 or at 30°P, that's fine.' We started to care about being exactly 31.5 or 32°P," or a gravity of 1.136–1.139," O'Doherty says.

Across the board, Half Acre has become more thoughtful about what goes into barrels. For example, it nixed barrel-aging

The aging process had acted differently on the two versions, producing marked changes in color, aroma, and texture in the sweet barleywine but relatively little change in the drier one.

MAKE IT

Revolution Straight Jacket, Deconstructed

Marty Scott, barrel program manager at Chicago's Revolution, shares this recipe for their bourbon-barrel-aged barleywine blended from a younger, drier component and an older, sweeter one. However, this recipe represents the drier component, "and anyone brewing to those targets will be sorely disappointed at the resulting beer," he says.

For the older, sweeter one, kick up the gravity to 1.150–1.160 (34–36°P), aiming to finish around 1.032 (8°P). Barrel-age it for at least a year, then blend with a drier one aged about six months. For an unblended variation instead, Scott recommends targeting 1.130–1.140 (30–32°P).

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.110 (26°P)

FG: 1.016 (4°P)

IBUs: 20

ABV: 11.6%

HOPS SCHEDULE

0.45 oz (13 g) Chinook at

90 minutes [14 IBUs]

0.55 oz (16 g) Centennial at

15 minutes [6 IBUs]

YEAST

Wyeast 1968 London ESB

MALT/GRAIN BILL

19.8 lb (9 kg) Rahr Pale Ale

1.1 lb (500 g) Dingemans Cara 45

4 oz (113 g) Château Special B

DIRECTIONS

Mill the grains and mash in at 145°F (63°C). Raise to 150°F (66°C), rest 60 minutes, then raise to 170°F (77°C) and mash out. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to get about 8 gallons (30 liters) of wort, depending on your evaporation rate. Boil for 3 hours, adding hops according to the schedule. Chill to about 66°F (19°C), oxygenate the wort thoroughly, and add a big, healthy yeast starter. Ferment at 68°F (20°C) until activity begins to slow from high kräusen, then raise to 70°F (21°C) until complete and the gravity has stabilized. Rack to a freshly emptied bourbon cask, or to a glass or stainless fermentor with bourbon-soaked oak cubes, for 6 months before blending and packaging.

BREWER'S NOTES

Mash enzymes: We don't use them. Attenuation should come from a huge pitch of happy yeast. At this OG range, we usually pitch roughly 4 million cells/ml per °P—that's a lot of smack packs! (A big starter is best.) Any unfermented simple sugars will take us into cloying territory in a hurry. All residual sugar should be long-chain!

Gravity: If it's running too low as you go into the kettle, you can reduce the volume or adjust with dextrose or other sugars as needed.



for coffee beers Big Hugs and Orin after they proved to be too thin to stand up to oxidation in the barrel. “On the hot side, don’t just think of it as rushing to get this thing in barrels,” O’Doherty says. “Look at your roasted-malt percentages. Use some oats for body. Every step of the way does matter.”

Another lesson Half Acre learned: Ask for help. When struggling with Big Hugs and Orin, brewers called Phil Wymore, cofounder and brewmaster at Perennial Artisan Ales in St. Louis. Wymore suggested bulking up the malt bill on beers meant for barrels.

Likewise, problem-solving and collaboration have been critical at Magnanimous, which released its first barrel-aged beer for its one-year anniversary in 2021.

Today, Magnanimous has about 50 bourbon barrels filled with beers of various ages. Lukacina describes their brewhouse as “inefficient,” meaning the team is always hoping to pick up new techniques for cramming more malt and sugar into the mash tun. (They’ve tried overnight boils and double mashes, but they most frequently use products such as brewer’s crystals and liquid malt extract to increase starting gravity.)

Barrel-aged collaborations with California’s Bottle Logic and Virginia’s Commonwealth have proven invaluable.

“When we’re producing these beers and having issues on the hot side, knowing what someone else did in that situation helps a lot,” Lukacina says. “The most valuable thing about doing collabs is the information you get from the person you’re working with, whether process, recipe formulation, or just somebody to bounce creative ideas off.”

Increasingly, these lessons aren’t only about barrel selection or maintenance, or how many pounds of hazelnuts to use per barrel. Building a successful barrel-aged barleywine or stout starts long before the liquid touches wood, with some of the most critical moments in a barrel-aged beer’s life happening before anyone pitches yeast. 



BREWER'S PERSPECTIVE

The Magnanimous Approach to Brewing Stout Bound for Barrels

Magnanimous Brewing in Tampa has built a strong local following for its big-flavored beers, including its barrel-aged imperial stouts. Here, founder and brewer **Mike Lukacina** shares some thoughts behind their ever-evolving base stout meant for aging in whiskey casks.

THE RECIPE AT RIGHT is just an example of one of our base stouts that we use exclusively for aging in barrels. That recipe changes because we like to tinker with the ingredients.

For a recipe like this, we typically use bourbon or rye whiskey barrels. Because we don’t get to brew these all the time, we like to experiment with different specialty or roast malts and various grain adjuncts. For the base malt, typically, we pick a simple (or less expensive) base malt such as your usual two-row—but then we have a little more fun filling out the rest of the grain bill.

As with the mash tuns at many smaller breweries, there’s only so much we can cram in there. That reality affects other decisions, such as the use of sugars and how much dark malt we can include. So, we experiment where we can.

Adjuncts

Typically, we use oat malt because of its ability to help the lauter, thanks to its great husk addition to the grist. Simpsons Golden Naked Oats or flaked oats also add great mouthfeel to the beer.

In addition to the oats, we sometimes mix and match by using rye and/or wheat. When we’ve used those in the past, we’ve also typically chosen specialty malts made from those grains, too—for example, going all-in on a rye stout by including flaked rye, rye malt, chocolate rye... You get the idea.

Specialty and Roast Malts

For our specialty malts, there are a few that we always seem to use—pale chocolate, Simpsons DRC (Double Roasted Crystal), and medium crystal malt almost always find their way into the mash.

This is really where you can push the direction of the beer’s flavor—use some Special B or certain darker crystal malts, for



example, to get a fruitier or more raisin-like character. Or you can go lighter and simpler, using a basic blend of crystal 60, 80, and 120 to get more of a classic malty profile.

The roast malts also give you some freedom to experiment and really dial in the result you want. Black patent, Carafo, and classic roast barley are all reliable sources for adjusting the color and flavor.

Water

Depending on your water source, consider adding calcium carbonate to help adjust the pH because of the use of the dark malts, which increase the acidity. The calcium carbonate also contributes to the flavor, helping balance and cushion any acrid or sour flavors from those same malts.

Sugar

We typically boost our gravity with sugar to avoid having to boil for extreme periods of time. Our brewhouse isn't very efficient, and we're extremely limited in how far we can push the sheer quantity of grist and, therefore, the percentage of less-fermentable darker malts—we are trying to cram in all the fermentables we can.

Brewer's crystals (a mixture of glucose and corn-syrup solids), maltodextrin, cane sugar, and malt extract are all common additions for these big stouts. Lately, we've been adding liquid malt extract to the boil with good results. Each of these sugars will ferment slightly differently, so make sure you choose what's right for your project.

PHOTOS: COURTESY MAGNANIMOUS

MAKE IT

Magnanimous Base Stout, Built for Barrels

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 36°P (1.159)

FG: 16°P (1.065)

IBUs: 40

ABV: 12.2%

MALT/GRAIN BILL

11.6 lb (5.3 kg) pale two-row

4.4 lb (2 kg) oat malt

1.5 lb (680 g) each Simpsons DRC and Medium Crystal

10.5 oz (298 g) each chocolate malt, pale chocolate, roasted barley, and Weyermann Carafo Special II

HOPS & ADDITIONS SCHEDULE

4.1 lb (1.9 kg) pale liquid malt extract at start of boil

2.8 lb (1.3 kg) brewer's crystals at start of boil

1.8 oz (51 g) Columbus at 60 minutes [40 IBUs]

YEAST

Fermentis SafAle US-05 or other Chico strain

DIRECTIONS

Mill the grains and mash at 152°F (67°C) for 60 minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge only minimally; stop running off into the kettle once the gravity starts to drop. Top up as needed to get about 6 gallons (23 liters) of wort, depending on your evaporation rate. (You can also add more sugars, if needed, to hit gravity.) Boil for 60–180 mins, adding sugars and hops according to the schedule. After the boil, chill to about 68°F (20°C), aerate the wort, and pitch a big, healthy yeast starter. Ferment at 72°F (22°C) until the beer is about 50 percent fermented (~1.110), then raise to 75°F (24°C) or finish at ambient temperatures. Once fermentation is complete, rack to bourbon or rye barrels (or a glass or stainless fermentor with whiskey-soaked oak cubes) and age 1–3 years.

BREWER'S NOTES

Mash: On our system, we start to recirculate ASAP after mashing in, and we also start the run-off ASAP, or else the mash compresses and gets stuck. That also affects the color of our beer. As long as you get conversion, do what works best on your system.

Hops: For our 60-minute bittering addition, we usually use up some open bags to hit the target.

Those hops won't make or break the beer—we just want some IBUs.

We also don't want too much bitterness to interfere with the roast character.



BREWING INGREDIENTS

Malted Rice, on the Rise,

New research points toward much greater potential for rice malt in brewing—with varieties that provide color, character, and brewing specs that aren't so different from barley. **By Joe Stange**

IT'S POSSIBLE THAT RICE MALT, in the years to come, never really grows beyond the gluten-free category—a niche, but an important one in which studious brewers have worked hard to raise expectations, often producing beers as tasty as those made from barley and wheat.

Yet there's another fork in the road, and it's one that could send rice malt into the brewing mainstream. In this alternate reality of the maltiverse, it becomes a compelling option for a much wider range of brewers who, otherwise, would mainly stick to barley malt and only use rice, if at all, to lighten up lager.

Recent research points toward that greater potential. It points toward a wider range of rice varieties that can be malted and made into beer. It points toward a wider range of aroma, flavor, and color contributions. It even points toward varieties with

enough diastatic power to convert rice's starch into sugar *without* adding exogenous enzymes—something that virtually all gluten-free brewers need to use today.

Many brewers may not even realize that rice can be malted. Knowledge about its potential is lagging because the brewing industry has mostly viewed rice as a cheap adjunct, says Scott Lafontaine, the food scientist overseeing the recent research at the University of Arkansas. The perception of cheapness isn't quite right—rice can be more expensive than barley, at times—but that view basically reflects how the brewing industry has treated the grain.

Because rice “has been used as this by-product,” Lafontaine says, “we have lost the semblance of what *variety* does.”

Even the large malt suppliers that sell rice products to brewers don't have the same level of specs that they can provide

for barley malt. “We don't know what varieties have different gel temperatures,” Lafontaine says. “We don't know what we're getting from different varieties in terms of extract. ... We're trying to look at, ‘Okay, are there variety-specific characteristics that are beneficial to brewers?’”

As it turns out, there are. Part of what's striking, however, is that these are varieties that exist *now*—and nobody, so far, has tried to breed cultivars with malting and brewing in mind.

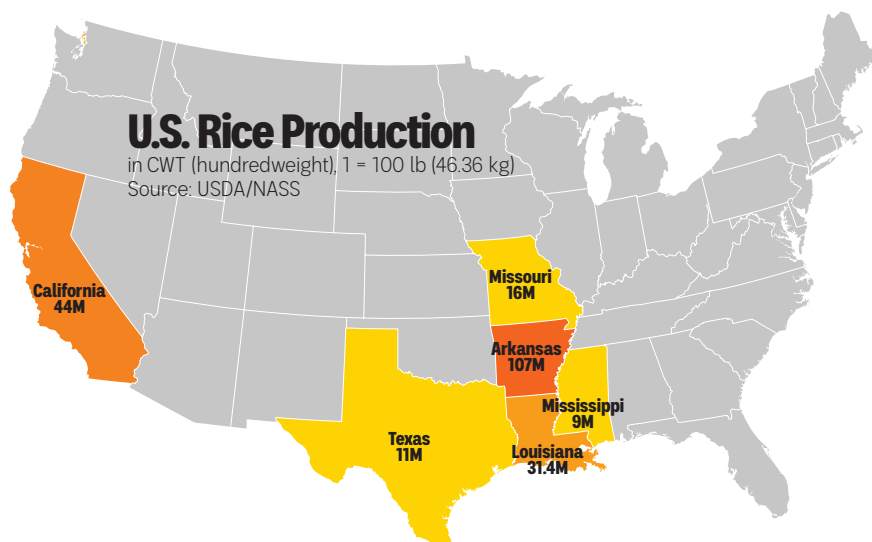
But what if they did?

Getting Granular

This eye-opening research is coming out of the University of Arkansas, whose state grows 40 to 50 percent of the country's rice every year—more than double what's grown in the second-biggest rice-growing state, California.

PHOTO: MATT GRAVES/WWW.MGRAVESPHOTO.COM





The Arkansas study published last year maybe didn't grab brewers' attention in the way one about hop aroma or lager yeast might. However, to better comprehend the possibilities, it's worth pondering the findings.

Led by doctoral student Bernardo Guimarães and Lafontaine—in collaboration with the USDA Agricultural Research Service and Berlin's VLB brewing school—the team malted, mashed, and tested 19 different varieties of rice. While there have been a handful of studies over the years looking into malting rice, this was the first time that anyone had malted and tested so many different types.

At every step of the way, they analyzed each variety for variables that matter to brewers and maltsters—specs such as protein, enzyme content, gelatinization temperature, and diastatic power, not to mention color.

Among the more interesting findings:

- Maybe you won't need that cereal cooker? The study found several varieties with gelatinization temperatures that start around 149°F (65°C) and peak around 158°F (70°C), suggesting that it should be possible to gelatinize them—even unmalted—in a typical infusion mash.
- Malted purple rice made red-colored wort, suggesting it could be useful for contributing vibrant color to beer or other drinks. And because that color doesn't come from Maillard reactions—unlike caramel malt, for example—beer made with it should be less prone to oxidation and stale flavors.
- Most of the varieties tested had ample amino nitrogen and soluble protein to promote healthy fermentation.
- Certain varieties had enzyme packages fully capable of saccharifying their starches, meaning it may not be necessary to add exogenous enzymes to beers made from 100 percent rice malt.

While the February 2024 study didn't evaluate aroma and flavor, the research team has been doing that more recently for an upcoming paper—one analyzing beers made from 100 percent rice malt. What they're finding, Lafontaine says, is that aromatic rice varieties can lend their qualities to finished beer. Meanwhile, nonaromatic varieties can lend their neutrality—which can also be desirable to brewers.

Before getting into the wider implications, let's briefly consider these findings in more detail and what they could mean in the brewery.

GEL TEMPERATURES

For starches to become fermentable sugars, they must first be gelatinized.

Brewers who work with rice—unless they're using pre-gelatinized forms, such as flakes or syrup—know that rice typically has a higher gel temperature than barley. That's why we use cereal cookers to heat that rice separately, planning for a gel temperature of perhaps 171°F (77°C). (At Ghostfish, the award-winning gluten-free brewery in Seattle, head brewer Reid Ackerman says he recently received rice malt with a max gel temperature listed at 181°F/83°C.)

As it turns out, however, the range of gel temperatures can vary significantly

among different rice varieties. Several types the Arkansas team studied had ranges sitting squarely in the 150s°F (66–71°C)—meaning that it could be possible to mash them at the usual temperatures without needing a separate cereal cooker, and without needing to resort to flakes or syrups. In that case, a brewer could simply mill the rice along with the barley malt and mash them together.

Again: None of these varieties, so far, have been bred for malting and brewing. These findings, Lafontaine says, are “challenging these historical notions about what this raw material is.”

COLOR

Craft brewers enjoy playing with color, whether it's using specialty malts, vibrant berries or other fruits, or more unusual ingredients such as spirulina (green) or butterfly pea flowers (purple-blue). Rice can be one of those toys.

The red and purple rice varieties get their color from anthocyanins—the same compound that provides color to blackberries, red grapes, purple corn, and many other fruits and vegetables. While the red varieties didn't ultimately contribute much color to the wort, the purple ones did—“an amazing red color,” Lafontaine says.

One obvious takeaway is that brewers could use those darker rice types to put some color into beer. (Depending on the type and how it's used, that rice could also provide fermentability and flavor—black sticky rice, for example, could provide a fruity flavor.) Unlike specialty malts that can lend a reddish hue, the color from rice doesn't come from Maillard reactions, so it wouldn't be prone to the oxidative flavors that can trouble caramel malt.

NITROGEN & PROTEIN

Besides rice's relatively low character and enzymes, brewers who use rice also expect it to be typically low in nitrogen and protein, potentially requiring additional nutrients. The Arkansas findings suggest that it doesn't have to be that way.

Several types the Arkansas team studied had ranges sitting squarely in the 150s°F (66–71°C)—meaning that it could be possible to mash them at the usual temperatures without needing a separate cereal cooker, and without needing to resort to flakes or syrups.

Many of the varieties they studied had free amino nitrogen (FAN) and protein levels that were higher than previous studies had found—levels roughly comparable to barley malt. That suggests that there may be more varieties better suited to brewing and fermentation—or that those varieties could be developed.

ENZYMES & EFFICIENCY

Compared to barley, rice is low in the amylase enzymes that help break starches into sugar, increasing fermentability. However, those aren't the only enzymes that can do that.

All the rice varieties in the study had high amounts of *limit dextrinase*, a de-branching enzyme—it breaks down more complex starches and contributes to greater fermentability. Notably, limit dextrinase is heat-sensitive, preferring a mash between 131 and 145°F (55 and 63°C). That means the trusty old single infusion at 152°F (67°C) isn't ideal, but resting first at a lower step can optimize that enzyme.

While rice is low in other enzymes that drive barley's diastatic power, "what we find is if we implement that low mash rest, we still get complete saccharification," Lafontaine says.

That holds true for beers made from 100 percent rice malt, he says. "But I think because we have that limit dextrinase there—and because we create these linear chains with a very low mash rest first, and then we go into that saccharification rest—we see success. So, that's the importance of understanding the raw material."

Rice malt isn't as efficient in the mash as barley malt, topping out around 72 percent extract (versus 80 percent for a typical base malt). However, Lafontaine says, "To me, that was already promising. Again, we have bred barley ... for hundreds of years to perform in this way. No one has ever considered malting rice."

AROMA & FLAVOR

Led once again by Guimaraes, the upcoming study on beers made from 100 percent rice malt is looking more closely at their sensory aspects, including aroma and flavor.

Some rice varieties, like basmati and jasmine, are aromatic, while others have little or no aroma. What the Arkansas researchers are finding is that those properties—aroma/flavor or the lack thereof—generally carry over into malt and then wort.

So, would you want your rice malt to contribute some aroma and flavor, or not? In brewing, either choice is valid—a super-clean, "super-dry" Japanese rice lager, for example, wouldn't be quite the same if it smelled like flowers and popcorn.



Some varieties contribute a corn-like flavor that's adjacent to barley malt, Lafontaine says. Notably, the main aroma compound responsible for the aromas of basmati and jasmine rice is 2-acetyl-1-pyrroline (2AP). It can smell like fresh-baked bread (which also has 2AP), like vanilla ... or like buttery popcorn.

"It could overlap with diacetyl," Lafontaine says, "but we find it characteristically different."

Some of those red, purple, and black rice varieties, meanwhile—in addition to color—also contribute fruity character.

"It was really interesting," he says. "If a brewery didn't want to stray too far from traditional beer flavor—traditional meaning barley-malt beer flavor—I think we could come up with varieties that would overlap. If we wanted to use rice to develop new flavor, I think that is also an opportunity."

A Malternate Future?

One premise of the Arkansas study is that American brewers may sooner or later need alternatives to barley—and in certain parts of the world, arguably, they're already needed.

Barley prices spiked globally in early 2022 after Russia's invasion of Ukraine, compounding global supply-chain problems and a disastrous North American harvest. Climate change, meanwhile, will continue to disrupt yields while shifting to places where barley can grow.

"I think my definition of beer is that it has to contain malted grain," Lafontaine says. "And if I look 20 years out, I start to think about, 'What's the solution here, if in North America we can no longer grow barley?'"

There are other options, such as rye and winter barley, but rice is attractive for another reason: It yields double to triple what barley does per acre, by weight. There may be a point at which rice malt becomes more economically viable in North America—but even if it doesn't: What about all those parts

of the world, today, where rice grows well but barley can't? Brewers in those countries are heavily dependent on imported malt, and they have been for years.

"I think this is actually really important for the Asian market," Lafontaine says, "in the sense that when we look at where barley is grown and who's importing barley, barley is not grown in the places where a majority of the beer is made."

So, what if they could malt what grows there, instead?

Most of what brewers worldwide know about rice hasn't strayed far from the methods developed by Anheuser-Busch in the 1870s. Properly cooked, it adds fermentability and lightens body, lending a crispness. Not many brewers have asked it to do more than that.

Virtually all rice grown today is meant to be milled into food. That includes the roughly 9 percent of the U.S. crop that goes into Budweiser and Bud Light, among other brands. That rice is about 30 percent of Budweiser's grist, and A-B InBev wants it starchy, neutral, and inexpensive.

Of course, none of that is malted. There's no incentive for rice growers to meet the specs of any maltster—not yet, anyway.

Because all that rice is milled for food, it's also de-hulled. So, here's another thing brewers may not realize: If you're going to malt rice instead of eat it, there's no need to remove the hulls—the same ones that many of us use to aid lautering. Rice malt that's kept its hulls provides the same benefit.

Outside the gluten-free niche, meanwhile, very few brewers have taken rice malt for a spin. That's changing because the Arkansas study has spurred wider interest. One of the next steps is to scale up the malting—from one kilo to 250—to better evaluate the malting potential, and then to get that malt into the hands of brewers.

One of the first breweries to reach out to Lafontaine and offer to trial some different rice malts was Allagash in Portland, Maine. Another was Boston Beer.

“We’re already seeing benefits and promise with rice, and this grain was not bred to do this. We’re already getting comparison on extract [with] barley... and we already have varieties that are self-saccharifying.”

Allagash R&D brewer Patrick Chavannele says he’s particularly interested in trialing beers made with 100 percent rice malt, to see what that beer is like.

“I’m not entirely sure what to expect from a fermented beverage like that,” he says. “Our real priority is to support the work Scott and team are doing, with the added benefit of getting to know a raw material in its infancy.”

The Paddy’s Potential

Not much is sacred in craft breweries today when it comes to ingredients but, to some extent, the *Reinheitsgebot* is still in our DNA. American microbrewing, after all, came up as a reaction to samey, omnipresent Bud-Miller-Coors. For years, adjuncts would disqualify you from Brewers Association membership. More recently—and amid growing interest in craft lager—more independent breweries are embracing rice and corn as adjuncts. And while some brewers are taking advantage of heirloom corn and its colors and flavors, rice has yet to get the same sort of attention.

That may be about to change.

“We’re already seeing benefits and promise with rice, and this grain was not bred to do this,” Lafontaine says. “We’re already getting comparison on extract [with] barley. We’re already getting similar extracts, and we already have varieties that are self-saccharifying.”

A few previous studies analyzed malted rice in a handful of varieties, but nobody ever analyzed 19 of them, and not to this level of detail. Next, the Arkansas team plans to study 250 more varieties—to be grown this summer and analyzed next winter. They’re acquiring the seeds from the USDA’s national germplasm collection—a fascinating archive of the world’s biodiversity, including crops that nobody grows anymore.

If they found so many surprises in a collection of 19 rice varieties, who knows what they’ll find in 250? We won’t see results until 2026, at the earliest, but that’s much faster than the decade or so that it takes to breed a new variety. Plus, that broader base of information

will be invaluable to future breeding efforts—breeding that’s geared toward malting and brewing, as well as yield and agronomics.

Lafontaine has traveled around Arkansas and the Mississippi Delta visiting rice farms, and “the only brewer that rice farmers have worked with is A-B,” he says. “I think a lot of them don’t even realize how big the craft-brewing market has gotten and the potential that exists there.”

Yet there’s a near-total lack of communication between rice farmers and craft brewers—and those brewers don’t understand rice in the way that they understand barley malt. “But those needs need to be communicated effectively, and those partnerships need to be built, right? That’s not something that just happens.”

That might also involve, eventually, brewers contracting with local rice growers for certain types of rice.

“I saw the hop industry change, where brewers’ needs really influenced that hop agriculture, hop breeding,” Lafontaine says. “And I think we’re very fortunate because we lived through that—we saw hops go from just bitterness and stability to the main show. We saw that change of an ingredient and how it could revolutionize an industry.”

Today, IPAs can be found worldwide, and many casual drinkers can name their favorite hop varieties—hard to imagine just a couple decades ago.

“That connection to agriculture really still speaks to me about how our raw ingredients shouldn’t be something that’s in the background,” Lafontaine says. “They should connect us to our place. They should connect us to the people putting in the work to grow that material.”

Dig into the Science

The Arkansas team’s malt study is titled “Investigating the Malting Suitability and Brewing Quality of Different Rice Cultivars” by Bernardo P. Guimaraes, et al. Published in February 2024, it’s freely available at mdpi.com.

MAKE IT

Eckert Kristina’s Challenge Pale Ale

With a grist of 100 percent rice malt, this homebrew recipe comes from Jim Eckert, the rice-malting pioneer who founded Eckert Malting & Brewing in Chico, California. This hop-forward American pale ale is gluten-free; without barley malt in the bill, it relies on enzymes to ensure saccharification and a healthy fermentation.

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.055 (13.6°P)

FG: 1.012 (3.1°P)

IBUs: 48

ABV: 5.7%

MALT/GRAIN BILL

15 lb (6.8 kg) Eckert’s Pale Rice Malt

2.5 lb (1.1 kg) Eckert’s Biscuit Rice Malt

1.7 lb (771 g) Eckert’s Crystal Rice Malt

HOPS & ADDITIONS SCHEDULE

40 ml Ceremix Flex enzyme at mash in

33 ml Onda Pro enzyme at mash in

2 oz (57 g) Cascade at 60 minutes [37 IBUs]

0.33 oz (9 g) Simcoe at 30 minutes [11 IBUs]

0.33 oz (9 g) Citra at flameout

0.5 oz (14 g) each Cascade and Citra at dry hop

YEAST

Fermentis SafAle US-05 or other Chico strain

DIRECTIONS

Mill the grains, mash in at 140°F (60°C), add the enzymes, and rest 1 hour. Slowly raise to 155°F (68°C) over 30 minutes, then raise to 175°F (79°C) over 30 more minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to collect about 6 gallons (23 liters) of wort. Boil for 60 minutes, adding hops according to the schedule. After the boil, chill to about 68°F (20°C), aerate the wort, and pitch the yeast. Ferment at 68°F (20°C) until fermentation is complete and gravity has stabilized. Drop trub or rack to secondary and add the dry hops. After 3 days, remove the dry hops, crash, package, and carbonate.



BREWER'S PERSPECTIVE

The Rice Maltster

Jim Eckert of California's Eckert Malting & Brewing—the world's first maltster to focus on rice—discusses how he got into malting rice and the unique challenges of his niche. **By Joe Stange**

Jim Eckert is a pioneer—the first maltster in the world to focus on rice. His malts are often found in the inventories and recipes of gluten-free breweries across the country. While a few more craft maltsters are beginning to offer rice malts among their products—and as new research points to wider brewing potential—Eckert's been doing it for more than a decade.

Here, he discusses how he got into malting rice, the challenges of trialing new products, and the limitations of sourcing grain that's otherwise grown only as a food commodity.

The Origin Story

Jim Eckert homebrewed with friends in college in the mid-1980s. While he was involved in grain research at the University of California, Davis, he also began to experiment with malting at home. "I tried to malt, and I was able to do it, but then I realized that the amount of time and effort involved was not worth it compared to what you could buy barley malt for at the local store. So, I gave that up, but it stayed in my memory."

Like many homebrewers, he thought often about starting his own brewery. Later, while he was researching weed control for California's rice crop, his wife learned that she was gluten-intolerant. "And she eventually started trying some [gluten-free] beers, and they just weren't doing it for her," Eckert says. "She came to me one and said, 'Well, you're a homebrewer, why don't you brew me a gluten-free beer that I like?'"

So he started to look into it. "I made one batch with just some rice extract, and it was fizzy alcohol-water that had minimal character," he says. "And she was thrilled. But I just couldn't look at myself in the mirror."

His research continued, and he began to think more about the grains he was working with every day. "I finally went, 'Well, I'm here at the Rice Experiment Station. I have lots of rice available to

me, and I've got some knowledge about malting. And I'll just malt some rice and try to make a little bit more interesting beer.' And so I did. I malted and dried it and roasted it in the oven at home. It was not wonderful, but it was progress. I went, 'You know, this has some potential.'

"So, I continued playing around with small-batch malting. And there was a day that I made a batch, and it was de-hulled and roasted to an amber-crystal kind of color. It was a really small batch—like three handfuls. It was in a bowl cooling off, and my daughter walks through the door and her hand goes in the bowl and into her mouth before I could say [anything]. And she just, 'Crunch, crunch, crunch.' She said, 'That's good, Dad! Make more.' So, I tasted it—because I hadn't even tasted it yet—and it's like, 'Yeah, okay, there's something there.'

"I continued to play around with it, malting and roasting in my kitchen, filling the house with smoke, trying to make a really dark malt."

Challenges

Meanwhile, he was looking for information online about malting rice. "There's almost nothing. Some Italian researchers had done some work with malting, and some Nigerians had done something. But I was looking at all their research papers and realizing that I was ahead of them in what I knew about it. So, I decided, 'Well, this is worth giving it a go.' So, I started to pursue it more diligently."

As he grew more serious about launching the business, he left his day job and committed. "First thing I did was buy an old pistachio-roasting machine that was in really ugly shape and had it rebuilt. And that's been my pride and joy—my little roaster. ... It does about 400 pounds at a time. ... It's been a good machine. It's done everything I ever expected out of it [and] a little bit more."

The plan was to make the malt for his own

gluten-free beers, made with 100 percent malted rice. They included a pale lager, dark lager, pale ale, and a Belgian-style strong ale. "I hit the market apparently a little bit too early and didn't get traction on that," he says about the beers. "But I got traction on the malting." That business has been going for about 12 years now—growing exponentially at times but plateauing more recently.

"We're kind of in a steady state right now," he says, with gluten-free craft brewers facing the same market challenges as others. "There have been a number of breweries that have gone out of business in the last year or two."

Occasionally, he says, non-gluten-free brewers buy his malt to produce summer lagers or other lighter-bodied beers. "And I believe they're using my malt in order to say that they had an all-malt beer, instead of one that's using adjunct rice. That being said, the flavor profiles of my malts are slightly different than barley malts. I try to hit similar colors and flavors, [but] it's not exactly the same. It's just different; there's no way around that. It is not barley."

"Definitely the biggest thing that people talk about is that [it] doesn't have as much body as barley beer," he says. "And one of the other big things is that rice has never been bred for malting quality, brewing quality, so enzyme activity is limited. And almost all gluten-free malt producers highly suggest use of extraneous enzymes to get full conversion. That goes for my product, at this point in time, until somebody breeds rice that has higher enzyme activity for breaking down the starches more efficiently."

Limitations

Eckert says he uses only two or three of the most available rice varieties in California, so that he can make sure he has enough for malting. "I've not seen anything extraordinary," he says. "If there's something as extraordinary—extraordinarily better—I might consider using it and trying to get some sort of a legal contract. But currently I have a very understanding supplier that always lets me know when they're going to be selling off their crop."

He says he's "played around" with some other varieties, such as California-grown basmati and red rice. But for those specialty varieties, it would take a bigger commitment to establish the commitments between grower and maltster, and maltster and brewer. "But no one's moved forward sufficiently to make it worthwhile to do it on the production scale we have," he says. "For a small malting company to bring in sufficient rice to make it worth it—for the producer of the rice to sell it to me—I don't have clientele purchasing it to make it worthwhile to go that route. ... If we had an agreement ahead of time for close to a full batch, or at least a half-batch, I would consider it."

In his company's earlier days, he says, he worked hard to convince more mainstream breweries to try out rice malt. "I went to several Craft Brewers Conferences and handed out samples to lots of barley breweries, trying to convince them to use my grain," he says. "And I got zero traction from all that work."

He has worked with a few non-gluten-free breweries since then, plus a few distilleries. Now, with the University of Arkansas research helping to raise rice malt's profile, he says he'd welcome some wider interest. "It'd be great to see more barley breweries utilize my malt." 

Clockwise from top: Tale Beer brews with “broken rice,” partial kernels left after the polishing process; Heritage uses a variety of Ghanaian ingredients in their beer and uses enzymes to improve fermentability; the mash filter at Tale is crucial for their high-rice grist bills

WIDE WORLD OF BREWING GRAIN

Grown in Ghana:

How and Why Brewers in West Africa Are Embracing Local Grains

It's not always a simple process, but independent brewers in Ghana are favoring locally grown starches such as rice and cassava over imported malt, forging an identity for Ghanaian craft—oh, and they're winning international medals for the beer. **By Lucy Corne**

THE 40-PLATE MASH FILTER at Tale Beer in Ghana takes pride of place on an elevated platform alongside the brewhouse. It's not a piece of equipment you find at the average African craft brewery, but it is a crucial part of the kit.

All the beers at Tale get at least 75 percent rice in the grain bill—so, without that filter, they'd be dealing with a Groundhog Day of perpetually stuck mashes.

Based in Nsawam—about 25 miles north of the capital, Accra, and surrounded by palm trees and lush undergrowth—Tale poured their first beers at the end of 2022. The following year, three of their core beers went on to medal at the African Beer Cup. The most impressive part of that feat: Some of them competed against all-malt beers—and beat them.

At the helm of this remarkable brewery is Austrian brewmaster Jan Kaserer, who took the job in 2022 after leaving a previous brewing job in Cape Town, South Africa.

“I came on a site visit, and when they explained the concept, I could see that there was real potential,” Kaserer says. “I was of course attracted by the chance to pioneer something new, but I also felt it was a way to build a real African beer style. It wasn't just a small brewpub—this was a sizable startup with proper infrastructure and financial backing, meaning we could really build something meaningful.”

Embracing Local

Historically, government regulations have a way of shaping regional brewing practices.

Britain's 1880 Free Mash Tun Act encouraged lower-strength beers. The roasted, unmalted barley used in Guinness was originally a way to dodge a bit of tax. And the attraction of lower taxes is what fuels Japan's *happōshu* trend—a growing category of beers with less than 67 percent malt.

In Ghana, meanwhile, the government places a high tax on imported brewing ingredients—there's an excise of 47.5 percent on beers of less than 50 percent Ghanaian ingredients. However, if a brewer could find a way to use *more* than 70 percent local ingredients—not including water, of course—in their beer, the excise duties drop to just 10 percent.

PHOTOS: LUCY CORNE



That's not the only driver for brewing local in Ghana, but the tax brackets were a welcome incentive for Tale's founders, Belgian-born expats Kristof Henot and Koen De Grave.

"It's not just about the tax," Kaserer says. "Embracing local ingredients makes a lot of sense, to avoid fluctuating prices when your currency isn't always stable. And, while we are taking inspiration from Belgian and American beer styles, we are not making Belgian or American beers—we are making Ghanaian beers, and you can't do that without using Ghanaian ingredients."

Brewing with Rice

Kaserer is experimenting with a range of African grains, including sorghum and millet. But Tale's core range focuses on one ingredient above the rest: rice.

"We buy what's known as broken rice," he says. "This is rice that, after the polishing process, is deemed to be imperfect. It usually ends up as animal feed. We buy around 30 tons per month, directly from farmers in the north of Ghana."

The founders conceived the brewery with rice in mind, and they built it to cater to the challenges it presents. Besides the usual grain mill, there's a hammer mill to pound the rice into flour. Once the rice is pulverized, the production team pumps the rice into a cereal cooker, spraying it with 158°F (70°C) water to avoid clumping. A dose of steam brings the temperature up to 176°C (80°C), where it rests for an hour to gelatinize.

Unsurprisingly, it smells just like a giant pot of rice boiling on a stove—I'm not sure why I expected anything else.

Meanwhile, in the mash tun, the malt—imported from Belgium—begins its protein rest at 118°F (48°C). Because rice is low in protein, that's a key part of the process, to ensure that Tale's beers have adequate head retention.

A decoction follows, with a third of the rice added to the malt mash, with a pH adjustment—particularly important when dealing with the enzyme that Kaserer uses to assist gelatinization. Then they add the rest of the rice, and a standard infusion mash begins.

Time to Taste

After the two-hour mash process, it's time for Tale's star piece of equipment to take the spotlight.

The team pumps that combined mash into the mash filter, forcing it through 40 plates to separate liquid from grain. What emerges is a remarkably clear wort with a surprising and impressive amount of malt character—it's full-bodied and sweet, with a slightly oily texture. (Then the somewhat less attractive residue—the dry mush



The core beers all take what we'd see as a classic style and turn them on their heads. Each one uses at least 75 percent rice in the grain bill, besides a variety of locally grown botanicals all grown on the brewery grounds.

of rice flour and spent grains—must be cleaned out of the filter by hand.)

I've attended plenty of brew days in my career as a writer, but few have been so intriguing or educational—or *hot*. It's so hot that I suspect I might never stop sweating. Periodically, I stick my face into the kettle, which makes the ambient temperature—easily above 95°F (35°C), even without the brewhouse running—suddenly seem a bit more bearable. That relief lasts a fleeting moment, then I'm once again embraced by Ghana's heat and 80 percent humidity. Right: Time for a beer.

Tale's brewery is mainly a production facility, but there is a small—and blissfully air-conditioned—tasting room looking down on the brewhouse. The core beers all take what we'd see as a classic style—farmhouse ale, IPA, tripel, and tropical stout—and turn them on their heads. Each one uses at least 75 percent rice in the grain bill, besides a variety of locally grown botanicals—including ginger, cocoa, hibiscus, and lemongrass—all grown on the brewery grounds.

The Tale 5 Farmhouse Ale—the beer currently boiling beneath us—features lemongrass and is ideal for this climate. It's fruity, dry, and effervescent, with an impressive pillowy foam. It also won gold at the 2023 African Beer Cup and silver the following year.

But the star, in my view, is the Tale 7 Ginger Triple—a magnificent manifestation of the base style and the herbal addition. For the Tale team, it's a point of great pride that this Ghanaian take on a Belgian style won a bronze medal at the 2023 Brussels Beer Challenge. (It also won silvers two years running at the African Beer Cup.)

Sorghum & Cassava

Tale isn't the only Ghanaian brewery winning international awards while using local grains. Heritage Brewing, the country's first brewpub, opened in 2023 in Accra—and it took both silver and bronze in the Alternative Fermentable category at the following year's African Beer Cup.

Danie Odendaal, Heritage's South African brewer, favors cassava—a starchy root vegetable also known as manioc—as well as maize and rice. To a lesser extent, they also use sorghum and tapioca, besides some imported malts.

"You could say that our concept has been nudged by the tax laws," Odendaal says, "but there is more to it. It's really about harnessing local flavors and making something uniquely Ghanaian. Imported malts actually land at a similar per-kilo cost to local ingredients—sometimes even cheaper. So, while the lower tax bracket is a factor, it's much more than that."

PHOTO: LUCY CORNE

Odendaal, a former brewer with South African Breweries, had plenty of experience in brewing with African grains—notably sorghum—in his various roles around sub-Saharan Africa. So, brewing with up to 70 percent nonbarley grains wasn't a huge leap—although making it work on a brewpub-sized system was more of a challenge.

"If you want to use 100 percent local ingredients, you need a mash filter," he says. "But typically they're built for a much bigger system, and while we looked into having one custom-built, it was prohibitively expensive."

Instead, Odendaal and his team use a proprietary cocktail of enzymes, an adjusted mash process, and a custom-designed lauter tun to produce Ghanaian takes on IPA, lager, APA, stout, and several fruit beers. Those include a customer favorite that showcases Ghana's oft-exported mangos.

Rising to the Challenge

Odendaal and his team have designed what he calls a "multipronged enzyme regime" to treat the raw, alternative fermentables. They first heat for gelatinization—between 167 and 176°F (75 and 80°C), depending on the ingredient—then they add malt.

Working with cassava, rice, and maize comes with all manner of complications. Almost nothing has a husk, they don't offer much depth of flavor, and head retention is a challenge—though a touch of wheat helps with the last. Plus, as Odendaal says, the enzymes are "almost too efficient," meaning he has to finesse them to ensure there's enough residual sugar to help with flavor and mouthfeel.

So, what about that flavor? The lager is clean and crisp, the American-style pale ale is surprisingly bitter in a country where hop-forward beers are virtually unheard of, and the watermelon hibiscus sour is balanced, beautifully showcasing the fruit. But my favorite is the stout, which features *garri*—toasted cassava that's eaten as a breakfast dish throughout West Africa. The stout is a tad rich for the weather but full of flavor, with locally grown vanilla and coffee beans also starring in the profile.

While the use of alternative fermentables and traditional African brewing grains is growing in popularity among brewers across the continent, most of them are following international trends. In Ghana, however—partly nudged by prohibitive tax rules—brewers are taking classic styles and totally reinventing them.

"What really makes me happy," says Kaserer at Tale, "is when people drink the beer, enjoy the beer, and feel that it fits the style. Then they read that it has 75 percent rice, and they're like, 'What the fuck?' That for me is the biggest compliment. That's the best." 

MAKE IT

Heritage Chop Life Lager

From Accra's Heritage Brewing, Ghana's first modern brewpub, comes this recipe for their flagship lager—technically an ale, but cleanly fermented—featuring local maize and cassava as the bulk of its fermentables. (See the Brewer's Notes for possible ingredient substitutions.)

"'Chop life' basically means 'Enjoy life—no matter the obstacles or what life throws at you,'" says brewmaster Danie Odendaal. "That is the ethos of this beer—a great lager made with local ingredients, easy-drinking, to sit down and enjoy with friends and just enjoy life. ... We target using local ingredients in all our beers, as [they're] ingredients that we grow up with in everyday foods but very seldom use in a beer application, but [they're] so familiar to us."

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.048 (12°P)

FG: 1.010 (2.5°P)

IBUs: 18

ABV: 5%

MALT/GRAIN BILL

3.3 lb (1.5 kg) corn/maize grits

2.9 lb (1.3 kg) cassava flour

1.4 lb (635 g) pale two-row

1 lb (454 g) rice hulls

1.2 lb (544 g) Munich (10 SRM)

7.5 oz (213 g) unmalted wheat

4 oz (113 g) crystal (75 SRM)

HOPS & ADDITIONS SCHEDULE

Alpha-amylase enzyme at cereal mash-in
0.4 oz (11 g) Hallertauer Magnum at 60 minutes [18 IBUs]

2 g Irish moss at 10 minutes

1 tsp (5 ml) yeast nutrient at 10 minutes

YEAST

Lallemand LalBrew Nottingham

DIRECTIONS

First, the cereal mash: Mill the wheat, mix with the grits and cassava, and mash in at 149°F (65°C), adding the alpha-amylase. Raise to 185°F (85°C) and rest 20 minutes. Use iodine to test for starch conversion—it should be brown, not blue or black—and prolong the rest as needed. Meanwhile, mill the remaining grains, mix in the rice hulls, and mash in. Combine the two mashes and bring to 149°F (65°C) for 60 minutes, then mash out: Recirculate until the runnings are clear, then run off into the kettle. Sparge or top up as needed to get about 6 gallons (23 liters) of wort, de-

pending on your evaporation rate. Boil for 60 minutes, adding hops, finings, and nutrient according to the schedule. Chill to 54°F (12°C), aerate the wort, and pitch the yeast. When fermentation is complete and gravity has stabilized, crash, package, and carbonate to 2.6–2.7 volumes of CO₂.

BREWER'S NOTES

Water: We target a 50/50 calcium contribution from calcium sulfate (gypsum) and calcium chloride, adding them to the cereal mash to support the enzymes.

Enzymes: Amylase is often available from homebrew shops labeled as "distiller's enzyme." Follow the manufacturer's recommended dosage.

The Cereal Mash: Always confirm starch conversion (see "On the Road to Conversion," beerandbrewing.com). Note that depending on how the cassava flour is made, it could be acidic—as low as 5.0 pH. Check the pH optimums on your enzymes and adjust your cereal-mash pH as needed. If you want to avoid the cereal mash altogether, you could sub in flaked torrefied maize and tapioca syrup. (Tapioca is cassava starch.)
Nutrients: We use Lallemand's Yeastlife Extra at a rate 22 g per hl, or about 4 g for a 5 gal (19 l) batch.

Yeast: The Nottingham strain performs well with these lower-nutrition worts; other yeasts we've tried can sometimes produce a slight hydrogen-sulfide (rotten egg) note.

Finings: Besides using the Irish moss/carrageenan, using Clarex or a similar product can further reduce gluten and promote clarity.

BREWING INGREDIENTS

Mindfully Malty

When it comes to building your malt bill, go smarter, not harder. Here are some key insights from two award-winning brewers on purposeful malt choices that can elevate beers, not muddle them. **By Josh Weikert**

I LOVE THE DUALITY OF MALT.

For many brewers, it appears to be an afterthought. “I’m focused on my yeast,” says the lager brewer. “This new hop variety is *perfect*,” says the IPA brewer.

On the other end of the spectrum, many dark-beer brewers seem to adopt the “more is more” approach—it’s so easy to add another line to that recipe and hand it off to the miller, convinced that such-and-such grain will be the secret ingredient that makes a beer beautifully complex, like a golfer convinced that the shiny new driver is the answer to their prayers.

Getting the most out of your grist isn’t about leaning into other ingredients or piling on the grains. The best results come when we think through the realities of what our malts are, how they interact with the rest of our ingredients, and how we put them to use.

Mindful Malt Management

There’s innate value in using malts intentionally. That starts with knowing your products, then choosing the right tool for the job.

How do we learn about our malts? First, get to eating those grains—because they’re all different. Don’t assume that just because they’re labeled identically they have the same flavor.

“The same Lovibond malt can be vastly different from brand to brand, especially when you’re talking about anything darker than pale base malts,” says Matt Medley, director of brewing operations at Incendiary in Winston-Salem, North Carolina. (Incendiary, incidentally, won gold at the 2023 World Beer Cup for both its Porter and its Schwarzbier, and *Craft Beer & Brewing Magazine*® editors named the latter one of their Best 20 Beers of that year. So, Medley and his team might know a thing or two about darker malts.)

When you see “40°L Crystal” on the label, Medley says, all that really tells us is that the maltster roasted the barley to an average level of 40° Lovibond. Within that batch, there will be a range of roast levels around that number, and each maltster’s process and equipment are going to yield different

products. So, the best way to know what flavors you’re getting—besides brewing with it—is to have what Medley calls a “brewer’s snack” and just munch on a few grains.

Once you’ve tasted them, you’re in a much better position to choose the best malts for what you want to accomplish. Remember that it’s not just about hitting a target SRM for a particular style.

“Malts aren’t just for color—they’re like the spices of the brewery,” says Kelly Montgomery, co-owner and head brewer of Cincinnati’s Third Eye Brewing, a serial medal-winner for their darker beers (see “The Milk Stout Whisperer,” beerandbrewing.com).

“Take Crystal 80°L,” Montgomery says. “It’s got this awesome caramel, toffee, and dried-fruit thing going on. If I’m brewing an American amber ale, Briess Crystal 80L gives me that nice, clean caramel-and-toffee vibe. But if I’m going for a Northern English brown, I love using Simpsons Medium Crystal for its rich, nutty character. And then there’s Thomas Fawcett’s Dark Crystal Malt—that one brings this beautiful burnt sugar and deep red hue that just makes a beer look and taste luxurious.”

That flavor-focused approach progresses right up the Lovibond scale. As Montgomery says, moving up into the higher crystals—say, 90–100°L—adds more burnt sugar notes. Heading into the 120–150°L range—what I often call “bridge malts” because they straddle the caramel-roast line—we start adding not only dark caramel and burnt-sugar flavors but also stone fruit, molasses, and campfire flavors.

Like Medley, Montgomery says it’s important to try and then trust rather than just making label-based assumptions. “Each maltster has their own spin, so don’t be afraid to experiment and find out which one speaks to your brew,” he says.

Nothing embodies the “house flavor” of the bridge category for me quite like

“Malts aren’t just for color—they’re like the spices of the brewery.”



Briess Extra Special Malt, with its woody, fruity, marshmallowy flavors—proof that complexity doesn't have to be complicated. (More on that to come.)

Then we get to the chocolate malts—say, 300°L-plus. Dark? Yes, obviously. But which is best for your beer? It depends: What you use should be tied to what you want to get.

“Briess Chocolate Malt [at 350°L] is my pick for a smooth, classic chocolate-and-coffee backbone,” Montgomery says. “But if I need something with a bit more punch, Simpsons Chocolate Malt [450°L] has that intense cocoa-nib vibe. And for a deep, authentic chocolate flavor, Thomas Fawcett's Chocolate Malt [390–450°L] is unbeatable—perfect balance of chocolate and a hint of coffee.”

Paler chocolate malts represent another set of tools. Pale chocolate barleys and adjuncts—such as chocolate wheat and chocolate rye—can spear specific flavors that help define a darker beer style.

Crisp's Low Color Chocolate, Montgomery says, “is fantastic for English milds or brown ales, when you just want that subtle cocoa and nutty sweetness. But if I'm brewing a porter and want a true chocolate essence without the acidity, Thomas Fawcett's [English] Pale Chocolate Malt is my choice—it adds that deep amber color and pure chocolate flavor that takes it to the next level.”

I'm also an evangelist for chocolate rye—and not only, as Montgomery suggests, in dark saisons or black IPAs, where the earthy, subtle flavors are built into the styles. I also use it when I want to get “dark” flavors without the roast we get from other chocolate malts. Like Weyerhann's Carafa Special malts, chocolate rye has the added advantage of being huskless; without that roasted husk, the flavor profile tends to bring chocolate, coffee, and toasted-nut flavors without tasting burnt.

So, know your ingredients, choose them with care, and you're well on your way to a great grist that delivers on the flavors you want.

Getting Complex, Thoughtfully

“Complex” malt flavor is a feature in many style descriptions. But how do we create complexity?

There are a couple of key knobs we can turn here: the quantity and the type of ingredients. Neither is a surefire route to great beer, and a brewer should be flexible in using either or both.

Suppose we're making a pale beer. We can't pull deeply from the toasted-roasted malt well because that quickly drags our

beer up the SRM scale—getting darker and darker in color—even if we can restrain the flavors of those malts. So, one option is to use darker malts... but with a light hand.

“On the lighter beers, sometimes we'll do something like 5 percent of a low-SRM malt to add a little something extra,” says Medley at Incendiary. “For example, there is 2 percent Caramunich in our Italian pils.”

Conversely, you can also select low-Lovibond malts that independently impart complex flavors. For example, floor-malted pilsner can impart more prominent grainy, earthy flavors than standard pilsner malts. Likewise, a dash of something like honey or biscuit malt can have an outsized impact on complexity without darkening the beer too much.

In darker beers, we're largely free from having to worry about going too dark on the color. However, that introduces a new risk, and it's one known to any kid who's ever colored in a space with all the crayons: If we throw everything at the recipe to create complexity, we are likely to muddle our flavors beyond recognition. So, if you're going to go with a multigrain approach, you should do so conscientiously.

“My favorite trick for building complexity in dark beers?” Montgomery says. “Layering. Don't just rely on one or two malts—mix it up. A bit of crystal 80, some crystal 120, maybe a touch of Special B—it all adds up to layers of caramel, dried fruit, and molasses. Throw in Carafa Special III for a smooth roast—just enough of each to give depth without being harsh.”

What we don't want is our specialty malts competing with each other or taking over so much of the grist that we lose drinkability.

Can you go with just *one* complex crystal or chocolate malt? Possibly. Paler chocolate malts, for example, trade the sharp cacao punch of a 500°L roast level for the preservation of a wider range of flavors. It's always going to come down to what you need, what your chosen ingredients can provide in terms of flavor, and how your grist presents as part of a larger recipe.

Putting It All Together

Grain might be (literally) the heaviest part of your recipe, but it's still just a member

of the team. It's important to consider how ingredients interact and how your process influences those interactions as well as the character of the final product.

First, your malts add both flavor and sugars. With a lighter-colored malt, you get greater potential for fermentable sugars, which increase ABV while lightening the body. Darker malts behave differently because the kilning process has rendered more of their sugars unfermentable.

“I think about roast malts and their impact on final gravity,” Medley says. “Most of the protein and sugar in those are fused, and they offer very little fermentable sugars, if any at all.”

Sugars, after all, turn to alcohol—an important contributor to a beer's flavor and texture. We should be cognizant of its role in the final profile.

HOPS

Then there are hops. With a darker beer, Montgomery says, “you want hops that play well with dark malts. Fuggle, Saaz, East Kent Goldings—all are great for adding some earthiness that lets the malt shine. If I need more ‘oomph,’ Willamette has that floral, earthy character, and Northern Brewer gives a nice woody touch.”

But don't sleep on classic American citrus hops, either: They often play well against the chocolate notes of dark malts.

For whatever varieties you use, though, be sure to match the *intensity* of flavors of both hops and malt. If you're producing a grippingly sharp stout, it's probably not the time to be subtle and reach for the Hallertauer Mittelfrüh.

YEAST

Yeast also come into play, depending on whether you want to showcase the malt or contrast it.

“English ale strains like Wyeast 1318 are fantastic for bringing out fruity esters,” Montgomery says. “If I want it clean, US-05 works well.” For richer beers, White Labs WLP002 English Ale or Wyeast 1099 Whitbread Ale contributes “a lovely malt richness,” he says, while Wyeast 3787 Belgian High Gravity “adds dark-fruit notes that are perfect for Belgian styles.”

“My favorite trick for building complexity in dark beers? Layering. Don't just rely on one or two malts—mix it up. A bit of crystal 80, some crystal 120, maybe a touch of Special B—it all adds up.”

Yeast can also have surprising effects that transform the perceived malt flavors in a beer, Medley says.

"I heard in a CB&B podcast about how Augustiner yeast can impart a certain maltiness to recipes," he says. Another example: "I recently started working on revamping our light American lager recipe. I didn't put any German malt in it. ... Fermented it with 34/70, and the thing came out of the centrifuge tasting like a German leichtbier."

WATER

That leaves us with one more key ingredient: water. Here, we're both adjusting chemistry and application in the mash. Dark malts tend to lower the pH, so careful adjustments may be necessary.

"I like to keep my bicarbonate levels higher to buffer that," Montgomery says. "But not too much, or you'll get a chalky taste."

The salt ratios matter, too. "For our malty stuff," Medley says, "we typically adjust the water to get calcium in the fermentor and balance out the sulfate-to-chloride ratio to a 1:1."

Montgomery says he uses those additions to emphasize certain flavors. "For stouts, I lean toward sulfate to give the roast some bite. Or, lean toward chloride if you're trying to tamp down the roast."

MASHING

Finally, let's consider the mash. If your goal is a rich, chewy beer that really showcases your crystal and chocolate malts, a high mash temperature—say, 156°F (69°C)—is what Montgomery recommends. The reverse is also true: If you're shooting for the drier, starker flavor of an American stout, for example, then you may want to keep things in the standard 152°F (67°C) range, or even a touch lower.

One last tip: Montgomery says that he "conditions" his darker malts. "A little water on the malt before milling keeps the husks intact," he says, with the goal of avoiding tannin extraction. That keeps the beer smoother and less harsh—an important feature of great porters and dark lagers.

Think It Through

We all know brewing is a physical task—sometimes too much so, as anyone scrubbing a stubborn kettle stain can attest.

Malt, however, rewards thoughtfulness, creativity, and sound choices. While it may at times seem like an afterthought (in lighter beers) or a can't-overdo-it essential (in darker beers), it's neither.

Malt is the backbone of every beer, and thinking through how you'll use it is one of the best ways to build a perennial favorite. 

MAKE IT

Third Eye Astral Chocolate Stout

From Kelly Montgomery, co-owner and head brewer of Cincinnati's Third Eye—a frequent medal winner for their stouts—this richly layered recipe includes a range of flavorful dark malts plus additions of lactose, cacao nibs, and vanilla.

"Layering the crystal and roasted malts builds a stout with caramel, dark fruit, and smooth chocolate complexity," Montgomery says. "Carafa Special III smooths out the roast character, while chocolate rye adds an earthy depth." Further adding to the complexity are the malt extracts and 90-minute boil, which "deepen malt flavors and caramelization, contributing to the beer's rich body."

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.098 (23.3°P)

FG: 1.037 (9.3°P)

IBUs: 14+ (see Brewer's Notes)

ABV: 8.3%

MALT/GRAIN BILL

9 lb (4.1 kg) Crisp Maris Otter

12 oz (340 g) Thomas Fawcett Chocolate Malt

10.4 oz (295 g) flaked barley

10.4 oz (295 g) Simpsons Medium Crystal

8 oz (227 g) Weyermann Carafa Special III

8 oz (227 g) Briess Caramel 120L

6.4 oz (181 g) Weyermann Chocolate Rye

6.4 oz (181 g) Thomas Fawcett Pale Chocolate

HOPS & ADDITIONS SCHEDULE

1.4 oz (40 g) Willamette at 30 minutes [14 IBUs]

2 lb (907 g) lactose at 15 minutes

1 lb (454 g) dark dry malt extract (DME) at 15 minutes

1 lb (454 g) amber DME at 15 minutes

0.5 oz (14 g) East Kent Goldings at flameout

8 oz (227 g) cacao nibs at secondary

9 oz (255 g) Beanilla Madagascar Vanilla Extract Double-Fold at secondary

YEAST

White Labs WLP002 English Ale or Wyeast 1318 London Ale III (see Brewer's Notes)

DIRECTIONS

Mill the grains and mash at 156°F (69°C) for 60 minutes. Recirculate until the runnings are clear, then run off into the kettle. Sparge and top up as needed to get about 6 gallons (23 liters) of wort, depending on your evaporation rate. Boil for 90 minutes, adding sugars and hops according to the schedule. After the boil, chill to about 62°F (17°C), aerate the wort, and pitch the yeast. Ferment at 65°F (18°C) until complete and gravity has stabilized, then add vanilla and (in a muslin bag) cacao nibs. Remove the nibs after 3–4 days, then crash, package, and carbonate to about 2.5 volumes of CO₂.

BREWER'S NOTES

Bitterness: Technically, IBUs can only come from the iso-alpha acids in hops. However, the cacao nibs add perceived bitterness to the tune of about 30 IBUs in this recipe, for a total of around 44 IBUs (perceived).

Yeast: Go with White Labs WLP002 for richer malt depth or Wyeast 1318 for a malt-forward profile that also features soft fruit esters.

Higher Gravity: If you like your stouts super thick, you can add a pound of maltodextrin to further boost body and mouthfeel.

Malt conditioning: Lightly misting the dark grains before milling helps to prevent tannin extraction for a cleaner finish.



In centuries past, much of European brewing happened on the farm—and the choice of what to brew was as pragmatic as what to grow. With insights that could inform your next farmhouse ale, **Lars Marius Garshol** shares some truths about what those farmer-brewers planted, malted, and put into their beers.

HISTORICAL INGREDIENTS

The Farmer's Malt

HOMEBREWERS LIKE TO CALL their malt “grain,” but that would have sounded decidedly strange to Europe’s farmhouse brewers. They grew their own grain, then they malted it themselves—and for them, the difference was about 10 days’ work.

Modern brewing tends to focus on the malt and the wide variety of colors and flavors that the malting process can create. For once, however, let’s talk about where that malt comes from—because farmers still grow all of it.

Farmhouse Perspective

A major part of the reason farmers made beer at all is that they were already growing grain—that was how they got their food. So, the grain was “free,” in the sense that it cost them nothing as long as they

had enough left to eat. That meant they were limited to the grain they grew on their own farms.

The main concern when choosing which grain to grow was what type would give the greatest return. That was largely dictated by the climate and the soil. Farmers rarely changed which grain they sowed because they staked not only their livelihoods but their lives and those of their families on every single harvest. Most could survive a bad harvest, but if you make a mistake one year and have bad weather the next two, then suddenly you have a very, very serious problem.

That’s why farmers usually wouldn’t stake everything on a single grain, growing several types instead. A special precaution was to grow *sedge*—a mix of

barley and oats. It was a handy double bet: If the summer turned hot and dry, the barley would do well; if the summer was wet and cool, the oats would thrive.

In a way, the brewing really began with the planting. In some places, the farmer would choose in advance which field would support the grain meant for malting. They wanted thick, fat grain kernels, so they would choose the field most likely to give them that. In late summer, the farmer might inspect that barley field—and, if it looked good, dream of the outstanding beer they planned to brew from it. In western Norway, one farmhouse brewer told me that brewing good beer from the local grain could be challenging—but in years when the weather was right, you could knock it out of the park.

PHOTO: PUBLIC DOMAIN



491.
A. *Hordeum vulgare* L.
B. *Hordeum hexastichon* L.

Gemeine Gerste.
Sechszehnte Gerste.



A field of barley (left) and wheat (right) showing the different rates at which they ripen

Which Barley to Plant?

In most places, the preferred grain for malt was barley—and, as luck would have it, barley is the most adaptable grain.

Barley could grow farther north, where the summer is short, than other grains. In Norway, the northern limit for growing grain has traditionally been Malangen, at 70° latitude. That's 1,100 kilometers (more than 680 miles) north of Stockholm. Up there, few farmers could afford to brew from what little grain they grew, so the northern limit for farmhouse brewing was roughly at the Arctic Circle, or 66–67° latitude.

The farmers used barley in Britain, the Low Countries, Germany, Scandinavia, the Baltics, and Belarus, among other places—but in many of these places, they also grew and brewed with other grains. Only in Britain, Denmark, Germany, and Norway (away from the coast) were they reliably, entirely barley-based. (Here, we're mainly focusing on how it was in the late 19th century based on accounts of farmhouse brewing around then—bearing in mind that the grains farmers choose to grow has changed slowly over time.)

As we know, there are two different kinds of barley: two-row and six-row. Early taxonomy classified them as different species, but today we know the difference is just a single gene—so now they're one species, *Hordeum vulgare*. Yet it's easy to see which is which: An ear of two-row is basically a row of pairs of grains, while six-row consists of triplets. The individual grains are smaller in six-row barley because there's simply less room.

Today, maltsters worldwide tend to prefer two-row barley. North American brewers once favored six-row—its diastatic power is ideal for converting corn and rice—but in

recent decades they've moved toward modern two-row varieties. European brewers, meanwhile, use almost exclusively two-row.

Historically, however, European farmers tended to malt six-row barley. Some preferred two-row for its larger grains, while others liked six-row because it germinated more quickly during malting or because it had the most evenly sized grains. A Swedish saying held that “six-row gives much in the sack, but little in drink. Two-row gives less measure, but strong drink.” In short: Because six-row grains are smaller, you get more hulls and less starch, and therefore less sugar, in the same amount of grain.

You'd think that farmers would have a clear preference for two-row barley for their beer, but in Scandinavia, it wasn't common until the 19th century. So, it may be that some of the resistance was rooted in sheer conservatism.

Wheat and Rye

Why did farmers prefer barley over wheat for malting? Well, they didn't necessarily. For one thing, wheat is the most demanding of these grains to grow. Even in southern Sweden, farmers who tried to grow it found that the return could be less than what they sowed—“regret grain,” they called it. You'd have to get farther south, well into Germany and the Low Countries, before wheat was common enough to use some for beer.

Barley is great for beer, but it doesn't really have that many other uses. Today, what doesn't become malt usually becomes animal feed because barley doesn't contain much gluten, so you can't bake leavened bread with its flour. You can, however, use barley to bake a sort of wafer-thin, tasteless cracker—or, even more exciting, you can make porridge.

(How does it sound, to eat that every day? That was life for most farmers in Norway.)

What you need for leavened bread is gluten-rich wheat, or rye. Of course, rye has a stronger flavor, so those who could use wheat for bread preferred that. Thus, Europe ended up with three main bread-baking cultures: wheat bread in the west and south, rye going eastward from Denmark and Germany, and barley and oats in the north, from Ireland to Finland. Many who could grow wheat preferred to make their beer from something else, so they could save the wheat for bread.

In fact, wheat was quite traditional in farmhouse brewing. Only 2 percent of the accounts I've collected mention using it—and only in Austria, Estonia, Lithuania, and Sweden. We know wheat was widely used in Belgium's commercially available farmhouse ales—and in earlier beers sold in continental Europe—but I don't have much detail about what farmer-brewers themselves used. Wheat also is more common in archaeological finds from southern Europe, such as Spain, Greece, and Serbia—unsurprisingly, perhaps, given how much wheat loves heat.

The farther east you go, the more likely people were to brew from rye. It wasn't unusual to sow the grain in the fall; leaving it in the ground through the winter gave it a longer growing season, and rye handled cold winters better than other grains. It was also better at growing in poor soil. That farmers brewed with rye doesn't necessarily mean that they didn't also grow barley, or that rye is better than barley. Mostly, it means that their rye was better than any barley they were able to grow.

Most flour you buy in the store doesn't contain any whole grain because mills remove the outer part, the bran. Farmhouse brewers who had to mill their own malt used the whole grain, and rye's bran turns dark brown when it gets wet. I watched a Russian farmhouse brewer mix water into their milled, homemade rye malt—it looked as white as ordinary flour—and just adding water was enough to turn the whole thing chocolate-brown. Russian farmhouse ales made from pure rye malts are invariably brown—strangely, though, the rye flavor isn't necessarily that strong.

Oats and More

Oats are an oddball, more like a distant cousin to those other three grains.

In most places, people were clear that oats were *not* the preferred grain for malting. On the west coast of Norway, however, it grew much better than barley because of the wet, humid climate, so many farmers essentially were forced to use it. There, some farmers would look down on malted oats as a sign of

poverty, saying things like, “Oh, it’s just *oat* beer.” Farmer-brewers in western Sweden also used it, while elsewhere it was rare but not unknown.

Oats germinate more slowly than barley, so in Norway they usually malted it separately from barley. The Swedes, however, figured out that you could steep barley and oats separately, start germinating the oats first, and add the barley later. The difference was sufficiently well known that in Telemark, Norway, they had a saying—“he comes after, like the oat malts”—for people who were slow on the uptake.

In Scotland, the staple was bannock—a flat, unleavened oat bread about a finger thick. In his dictionary, Samuel Johnson famously defined oats as “a grain which in England is generally given to horses, but in Scotland supports the people.” This prompted a Scot to retort: “And never did you see such horses, or such men!”

Like wheat, oats add more protein to beer, making it hazier and fuller in the mouth—but they also add fats, which can lead to flavor issues if the fat has time to react with oxygen. The flavor of oats is different, too. I’ve tried experimental farmhouse ale from 100 percent homemade oat malt—it tasted *different*, but not unpleasant. So, perhaps when people in western Norway looked down on oat beer, they were just being snobs.

Besides the main types of grain, Estonia and Lithuania both have a tradition of brewing with a truly obscure grain: *brome*. It is widely regarded as a weed, but farmers have sometimes grown it for fodder—and for food, in some places. In Lithuania, some *keptinis* brewers used malted brome, as did some stone brewers in Estonia (see “Fire & Brew-Stone: The Real Story of Steinbier,” beerandbrewing.com). I have no idea what brome beer tastes like. Oddly, though, two accounts mention brewing processes that produce caramel flavors—a possible hint. Why did these brewers choose brome? Unfortunately, they didn’t say.

The situation is very different today. Most farmhouse brewers buy their malt, like homebrewers anywhere else in the world. Yet brewing from locally grown and malted grain is still going on in Stjørdal, Norway, on Gotland in Sweden, in northern Russia, and in parts of the Baltics.

Going to those places to try those beers is an obvious way to taste something like the farmhouse ales of past centuries would have tasted. Here’s another way: grow, malt, and brew with your own.



MAKE IT

Spydeberg Farmhouse Oat Ale 1779

This recipe is based on a late-18th-century account from Spydeberg, Norway, about 30 miles southeast of Oslo. The author was Jacob Nicolai Wilse, a priest and notable chronicler of Norwegian village life. These farmer-brewers used 100 percent oat malt that they kilned in a *kjone*—a two-story kiln used for drying grains and other crops, with a wood-fired oven below a drying surface riddled with holes. Heat rose through the holes, and so did smoke—so that malt and this beer would’ve been quite smoky.

Oat malt is widely available, but *smoked* oats are not—Indiana’s Sugar Creek Malt occasionally offers them—so, see “Smoke on the Horizon,” page 40, for tips on cold-smoking your own malt. We’ve adapted this recipe somewhat for modern processes, but if you’re a masochist who wants to try the farmers’ methods, see the Brewer’s Notes below.

ALL-GRAIN

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.047 (11.7°P)

FG: 1.006 (1.5°P)

IBUs: 36

ABV: 5.4%

MALT/GRAIN BILL

11.3 lb (5.1 kg) smoked oat malt

HOPS & ADDITIONS SCHEDULE

3.3 oz (94 g) Saaz at 60 minutes [36 IBUs]

1.5 oz (43 g) bog myrtle at flameout (optional)

YEAST

Your favorite kveik

DIRECTIONS

The night before brewing, mill the grains, mix with about 11 quarts (10.4 liters) of unheated water, and rest it overnight. In the morning, add 7 quarts (6.6 liters) of *boiling* water, rest 60 minutes, then repeat that step with the same volume two more times. (That should get you steps around 116°F/47°C, 140°F/60°C, and 154°F/68°C—or don’t worry about it because the farmers weren’t recording temperatures.) Recirculate until the runnings are free of particles, then run off into the kettle. That should get you about 7 gallons (26.5 liters) of wort, or sparge/top up as needed. Boil for 120 minutes—or longer, if you like—adding hops and bog myrtle (if using) according to the schedule. (Optionally, brew a hop tea instead—see Brewer’s Notes.) Cool to about 99°F (37°) and pitch the kveik; ferment warm or at ambient temperatures. Primary fermentation should take only a few days, then chill, package, and carbonate as desired.

BREWER’S NOTES

Mashing: While the cold overnight mash and boiling-water additions are in the original account, the quantities are mostly guesswork. You could also do a standard single-infusion or step mash, if you prefer. The farmers lautered through rye straw and branches—possibly juniper—so there’s another option for authenticity.

Boiling: The 1779 account describes running off the wort, bringing it to boil, then pouring it back into the mash—*six to 11 times*. We include a long boil instead, but if you want to be super-authentic and have that kind of time on your hands, knock yourselves out.

Hops: Hops would’ve been homegrown; a lower-alpha Noble variety should get you close. The quantity is only a guess based on similar accounts. To make a hop tea, simply boil the hops in some water then, before boiling the wort, blend to taste.

Bog myrtle, aka *Myrica gale*: Wilse writes in 1779 that they once used this in the beer, historically; that probably would have been the 17th or early 18th century. (For more about brewing with this plant, see “Special Ingredient: Bog Myrtle,” beerandbrewing.com.)

Small beer: The farmers made a lighter beer afterward—only about 2 gallons/8 liters at this scale—by simply adding more water and running off once more.

Warm pitch: There’s another account from roughly the same period—also from a priest, but in Telemark, west of Oslo—and it describes the pitching temperature as “cooled until you can keep your finger in it.” That would be higher than 99°F (37°), but 97–99°F (36–37°C) is most common for kveik pitches.

NO RESTS FOR THE WICKED

Brewing the Lighter Darkness

Rich in malt flavor yet light in strength and easy to drink, low-ABV stouts, porters, and other dark beers represent a wide-open playground for brewers at any level. **By Annie Johnson**

LATELY, I'VE BEEN STRUCK by all the low-ABV and nonalcoholic beers appearing on shelves. I've also been surprised by how tasty many of them are. And yet most of them seem to emphasize hops rather than malt—which makes sense, considering hops add aroma and flavor but not fermentable sugar. Plus, IPA sells.

Still, I've found myself wanting low-strength beers with more malty *oomph*. These low- and no-alcohol craft beers are joining the usual suspects at the store, the NA macro beers, which I've always enjoyed for what they are: cheap, low in flavor, and pretty close to carbonated water. I don't think there's much need for us

as homebrewers to venture into truly *non-alcoholic* brewing—the technical difficulty to do it well is incredibly high, and their high-tech equipment is out of reach.

Lower-alcohol beers, however, represent a worthy challenge—and delicious ones are relatively easy to brew, if we keep certain principles in mind.

Light but Flavorful

While the commercially available low-alcohol beers lean hoppy, what about other styles? What about porters, stouts, red ales, or the darker Belgian, British, and German styles? Where are those? And isn't this why many of us get into homebrewing in the

first place—to brew the kinds of beers at home that we couldn't find in the store? I know that was the case for me.

So, I've lately started brewing lower-alcohol versions of some of my greatest hits. My goal is to enjoy these styles without the big buzz they might otherwise bring. I've begun to think of myself as a monk, of sorts, brewing smaller table beers for day-to-day consumption.

The challenge, then, is to pack in the malt flavor but keep it lower in strength. This is the question I've asked myself: How can I brew lower-alcohol beers that still taste full-flavored and full-bodied?

Fortunately, there's no need to reinvent the brewing wheel here. There are existing tips, tricks, and methods that can get us there—and British brewing, with its modern history of full-flavored, session-strength ales, can help show us the way.

Building a Recipe

As a guiding light, I decided to use an English dark mild as a starting point. Roasted malts can then help bring that into porter territory. There are other options here—such as a table beer or “small beer,” possibly in the Belgian style, that could be in the range of 1.5 to 3 percent ABV. Whatever you choose, it makes sense to start from a style that you know is typically flavorful despite being low in alcohol.

Yeast choice is important for lower-alcohol beers, and it's an area where we can let a yeast strain's flavor profile really shine. British ale strains can add fruity esters and—in some cases—slight diacetyl, which at low levels can add a sense of

Yeast choice is important for lower-alcohol beers, and it's an area where we can let a yeast strain's flavor profile really shine. British ale strains can add fruity esters and—in some cases—slight diacetyl, which at low levels can add a sense of richness to malt-forward beers.



One combo I like is British pale malt extract with a debittered German dark malt, such as Weyermann Carafa II, to add color. A lower-Lovibond chocolate malt also imparts color and some chocolate character that enhance any small dark beer. Briess Midnight Wheat is another malt that can bring reddish or garnet hues.

richness to malt-forward beers. If you're going more Belgian style, saison strains can add spicy complexity; they'll also attenuate down to dryness without necessarily feeling "thin" in body. German weizen strains can also add banana and/or clove notes that can help a low-strength beer feel more substantial. For ambers, reds, or other styles where you might want to deploy New World hops, you can always lean into our old friend Chico, or another neutral strain.

The hops won't affect the alcohol—you can stay true to your underlying style—but we want to keep balance in mind. With a lighter-strength beer, that often means easing up on the IBUs; if you're brewing this for the first time, it's best to use a brewing calculator or software to estimate your bittering rate.

My advice: Skip the neutral, high-alpha bittering hops, such as Magnum. Instead, use finer aroma hops to get your IBUs—you'll get a smoother bitterness and enhanced hop character overall. Those could be floral English types, zesty-spicy Nobles, or even fruit-forward New World hops—but watch those alpha acids and use that calculator. Finally, if you're dry hopping, it also makes sense to dial those quantities back, to help keep the hops in balance with the rest of the beer.

Malt is one of the easier aspects to manage in a lower-ABV beer—especially for extract and partial-mash brewers. I prefer to dissolve pale liquid malt in a bowl with a bit of warm water, then I add it to the kettle to help avoid any scorching. You can use the same method with any sugars. You can also go "beyond the pale," so to speak, and use darker extracts to add some immediate flavor depth and color in lieu of—or in addition to—a combination of specialty malts.

If you do use pale malt extract, one combo I like is British pale malt extract with a debittered German dark malt, such as Weyermann Carafa II, to add color. A lower-Lovibond chocolate malt also imparts

color and some chocolate character that enhance any small dark beer. Briess Midnight Wheat is another malt that can bring reddish or garnet hues in lesser amounts, or you can take it darker with larger quantities. Like Carafa, it provides a smoother, subtle roast flavor without burnt or astringent taste. Darker crystal malts can also lend color and sweetness. With all these specialty malts, however, a good rule of thumb is to keep them to no more than 15 percent of the total grist. And, as with the IBUs, a brewing calculator can help you estimate the color you're likely to get.

Without being able to rely on a huge malt base for flavor, we can look elsewhere for added depth. British ales often include flavorful sugars, such as invert, that can provide some of that. (For tips, see "Zebulon's Mike Karnowski Shares Four Ways to Make Invert Sugar," beerandbrewing.com.) Unrefined sugars such as turbinado and demerara can contribute, but it's a good idea to limit these additions to no more than 15 percent of your fermentables. That sugar adds alcohol and lightens the body—and we want that body, right?—plus it can impart fruity flavors that may taste artificial. As with the hops, we should think of flavorful sugars that complement the malt.

After brewing several of these lower-alcohol beers in various styles, I've really come back to the classics, such as dark milds, porters, saisons, and lighter abbey beers—there are reasons why people have been brewing them for a century or three. These are beers for working people to quench thirsts or wash down meals and still be able to function.

I'm neither a farmer nor a monk, so my own reasons are slightly different. But here's a truth that my beers share with theirs: Small in strength doesn't have to mean small in flavor.

MAKE IT

Annie's Capitol Corridor Session Porter

PARTIAL-MASH

Batch size: 5 gallons (19 liters)

Brewhouse efficiency: 72%

OG: 1.037 (9.3°P)

FG: 1.009 (2.3°P)

IBUs: 24

ABV: 3.5%

MALT/GRAIN BILL

4.5 lb (2 kg) amber liquid malt extract (LME)

14 oz (397 g) crystal 60°L

5 oz (142 g) chocolate rye

3 oz (85 g) chocolate malt

HOPS SCHEDULE

1.4 oz (40 g) East Kent Goldings at 60 minutes [24 IBUs]

YEAST

Lallemand LalBrew London or other British ale strain

DIRECTIONS

Mill the grains and steep in a mesh bag in 1 gallon (3.8 liters) water; heat to about 155°F (68°C) and hold for 30 minutes. Remove the grains and rinse them with hot water, topping up the kettle to about 3 gallons (11.4 liters). Switch off the heat source and add the malt extract in batches, being careful not to scorch and stirring to dissolve. Boil for 60 minutes, adding the hops according to the schedule. After the boil, top up with cold water to get 5 gallons (19 liters) or a bit more. Use a hydrometer to check the gravity, adding more extract to adjust if desired. Chill to about 68°F (20°C) and pitch the yeast. Ferment at 68°F (20°C) or ambient temperature until complete—about 10 days—then crash, package, and carbonate as desired.





Tasted

Explore the Maltiverse alongside our blind-panel judges as they taste and score malt-driven ale styles from **barleywine** to **sweet** and **dry stout** and **porter, amber, red,** and **brown Ale**, British styles such as **Scottish ale** and **mild**, and more...

INSIDE CB&B

How We Taste & Test

Reviewing beer may sound like a dream job, but our tasting and review panel takes the role seriously. Composed of professional brewers, certified Cicerones, and Beer Judge Certification Program (BJCP) judges who have all studied, trained, and been tested on their ability to discern characteristics in beer, our panel is independent and diverse. The panel tastes all beer blindly—they do not know what brands and beers they are tasting until the tasting is complete.

Our goal is to inform you about the strengths and weaknesses of these beers as well as their relative differences (not everyone has the same taste in beer, so accurate descriptors are more valuable than straight numerical values). The quotes you see are compiled from the review panel's score sheets to give you a well-rounded picture of the beer. To add to that snapshot, we also include a brief review from an editor, although that editor's input does not impact the score.

As our reviewers judge, they score based on the standard BJCP components: Aroma (max 12 points), Appearance (max 3 points), Flavor (max 20 points), Mouthfeel (max 5 points), and Overall Impression (max 10 points). We've listed these individual component scores, and the bottom-line number is derived from adding then doubling these component scores to produce a rating on a 100-point scale. Note that the component scores are rounded automatically to the next whole number, so numbers here may appear to not add correctly. Rest assured that the score calculation is built off the numbers before rounding.

Our judges use the following scale in valuing scores:

95–100 » Extraordinary

World-class beers of superlative character and flawless execution

90–94 » Exceptional

Distinguished beers with special character, style, and flavor

85–89 » Very good

Well-crafted beers with noteworthy flavor and style

80–84 » Good

Keep one thing in mind as you read these reviews—your perception of a beer is more important than that of our review panel or editorial staff, and reading reviews in a magazine (or online or in a book) is no substitute for trying the beer yourself.

TASTED: BARLEYWINE & STRONG ALE



Kros Strain Barleywine Vol. 12: Sandhills Crane

98

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Barleywine-style ale aged 24 months in Elijah Craig barrels. Aromas and flavors of marshmallow, cinnamon, tobacco, cherry, orange, oak spice with a slight boozy finish."

What our reviewers thought:

"Heavy baker's chocolate with dark fruit (prunes, cherries, figs), whoppers, tannic oak vanillin, milk chocolate, and rich, concentrated red grapes. Slight aged oxidation notes create welcome complexity."

What our editors thought:

"The aroma pulls together disparate notes—dark fruit with a pronounced vinous quality, vaguely orange-tinged hops, deeper chocolate and caramel notes—with remarkable aplomb and unmatched refinement for an almost sangria-like spectrum. In the flavor, orange top notes glisten over a deeper milk-chocolate body—Terry's Chocolate Orange in full effect—while the lingering ethanol note springs into the finish for a sharp and intentional coda. Both artful and fearless in its approach to the blend."

ABV: 13% IBUs: 55

Loc: LaVista, NE

Alma Mader Reflection Chamber(2024)

97

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"On the nose and initial sip, bright Bing cherry and plum."

What our reviewers thought:

"Luxurious chocolate, toffee, butter-scotch, crème brûlée, marshmallow, brown sugar, and blackberries. Big mouthfeel borders on cloying but has enough fruitiness and warming alcohol to ensure it's sipped, not quaffed."

What our editors thought: "Spicy aroma with big layers of plum, red wine, long-aged cellar must, and boozy chocolate. Layers of caramel, peanut, and brown sugar in the flavor, cemented on a firm, earthy chocolate base."

ABV: 14.7% IBUs: N/A

Loc: Kansas City, MO



Black Spruce Voracious Tendencies

88

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"Black barleywine aged in rum barrels for 15 months."

What our reviewers thought:

"Layers of caramel, toffee, chocolate, root beer, leather, vanilla in the nose, with a hint of coconut-forward booziness. Strong flavors in the body: roast, hop bitterness, spicy barrel notes, whiskey. Rum-like heat hits early in the sip, creating a coconut note to counter the more traditional caramel, toffee, vanilla."

What our editors thought:

"Woody with a bit of dry barrel vegetal character in the aroma. Chocolate pushes forward in the sip with a round bitterness and just a hint of sweet caramel malt to soften."

ABV: 15.9% IBUs: N/A

Loc: Fairbanks, AK



American Solera My Sacrifice

94

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Aged 40 months in 27-year-old Heaven Hill barrels."

What our reviewers thought:

"On the nose, oak notes, toasted cracker, mushroom, aged soy sauce. Flavor is layered, complex, and compelling with notes of dark chocolate, caramel, truffles, vanilla, plum, coconut, leather, bourbon, and marzipan."

What our editors thought:

"Intriguing aroma with bits of woody bourbon, amaro-like spice, sweet caramel, aged leather, and a fortified-wine note. Roundly vinous in the sip with dark fruit, decisive ethanol, and boozy chocolate."

ABV: 16% IBUs: N/A

Loc: Tulsa, OK



Brotherhood Noble Cask

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Blend of dark English barleywine recipes aged in bourbon barrels and finished in a Cognac cask."

What our reviewers thought:

"Heavy rich toffee, dark fruit (cherry, plum, and fig), red apple, tobacco, chocolate, and roast malt. Medium-high caramelized apple with low acidity and tartness. Flavor has dark chocolate, sweet pastries, toasted fruits."

What our editors thought:

"Toffee notes with nutty midtones in the aroma. Jovial flavor buoyed by lighter sweet bread, nut, and spice tones, sharpened by a touch of bourbon heat. Nimble for its size."

ABV: 14% IBUs: N/A

Loc: Mokena, IL



REVIEW PHOTOS: PAUL HUTCHINGS AND JAMIE BOGNER

Cerebral Celestial Origin 15 Yr Woodford

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Brewed with floor-malted Maris Otter and a touch of wheat."

What our reviewers thought:

"Big bourbon-barrel notes. Big milk-chocolate malt notes that the alcohol helps balance. Heavy Tootsie Roll, toffee, molasses, and burnt fruit (plum, dates, figs). Medium-sweet and spicy bourbon, low tannins, tart dark fruits. Almost drinks like a dessert stout."

What our editors thought:

"Strong, vinous aroma like Port wine, with chocolate and earth. Sweeter red-wine notes in the sip, with indulgent caramel and coconut."

ABV: 12.9% **IBUs:** N/A
Loc: Denver



Epic Barley Wine Ale

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Robust mouthfeel, complex flavors: raisin, dark bread, sherry."

What our reviewers thought:

"Classic American-hop profile on the nose: orange peel, earthy, some pine. Hints of caramel, toffee. Sip has a healthy pine and orange bitterness balanced by a boozy caramel sweetness. Some spicy warmth emerges in the finish."

What our editors thought:

"Strong classic American hops in the aroma with orange and caramel tones. Reassuringly bitter in the flavor with aughts-throwback vibes. Evokes fond memories."

ABV: 9.6% **IBUs:** 61
Loc: Salt Lake City



Firestone Walker XXVIII Anniversary Ale

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Strong ale blended from seven beers aged in bourbon and rye barrels."

What our reviewers thought:

"Spicy and caramelly with licorice notes in the aroma. Dry leathery caramel, fig, fruity pear esters. Lightly roasted coffee, some cooked sugar. Smooth, aged rye-barrel wood complements the smooth, rich toffee malt. Finishes with just enough lingering bitterness."

What our editors thought:

"Direct aroma with light caramel and spicy notes, tastefully restrained barrel, and a bit of baseline chocolate. Vibrant in the sip, youthful despite the age, and blended with a bias toward energy over heft."

ABV: 12.7% **IBUs:** 32
Loc: Paso Robles, CA



Fonta Flora Coracoid (Double Barrel)

90

AROMA: 11
APPEARANCE: 2
FLAVOR: 20
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Blend of bourbon barrel-aged barleywine married with tequila barrel-aged imperial stout."

What our reviewers thought:

"Exotic aroma: hints of chocolate and bourbon but also tequila. Flavor is just as complex with cola, agave, chocolate."

What our editors thought:

"Sherry and Flanders red notes in the aroma, rich and saturated with a strong vinous core that carries through into the flavor without reaching 'sour' or even 'tart.'"

ABV: 14% **IBUs:** N/A
Loc: Nebo, NC



Deschutes Cellar Door Society: Munich Wein

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Huge caramel and dark fruit dominate the aroma."

What our reviewers thought:

"Big malty aroma with notes of caramel pastry, light chocolate, red apple. Great balance with the alcohol and sweet, bready malt flavor (toffee and caramel malt), dates, and figs. Low spicy alcohol with a light chocolate in the finish."

What our editors thought:

"Beautiful toasty, bready, raisiny, and boozy panetone-like notes in the aroma. Deep toasted and burnt bread crust notes in the flavor, focused by an ethanol buff for high relief."

ABV: 12.4% **IBUs:** N/A
Loc: Bend, OR



False Idol Velsigne

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"English barleywine aged in bourbon barrels for 16 months."

What our reviewers thought:

"Caramel and toffee notes are countered by oak-forward vanilla notes and an impression of booziness in the nose. Flavor notes align with the aroma with a healthy boozy note countering the rich, layered, malty sweetness. A decadent but uncomplicated sipper."

What our editors thought:

"Reassuring nutty caramel notes in the aroma with a slight floral flair and the requisite bourbon boost. Refined in the sip with a luxurious but taut texture."

ABV: 13.5% **IBUs:** N/A
Loc: North Richland Hills, TX



Fonta Flora Birthdaywine 11

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"A blended barleywine-style ale aged in bourbon and rum barrels."

What our reviewers thought:

"Heavy bourbon- and rum-barrel character, spicy alcohol with candied toffee, maple, rum, caramel. Low roast malt, raisins, figs with bigger barrel notes."

What our editors thought:

"Boozy saddle leather, hay, oak, and nutty aroma. Flashes sweet before tannins cut the caramel notes in the flavor then linger in the dark chocolate finish. Indulgent start, taut finish."

ABV: 13% **IBUs:** N/A
Loc: Nebo, NC



Highland Park The Good Life

91

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Caramel, toffee, barrel, and a touch of chicory. A balanced sweetness."

What our reviewers thought:

"Moderate toffee, toasted caramel, figs, dates, and light oak vanilla tannins. Medium-high sweet brown sugar with rich dark fruits and spicy bourbon. Sweet bourbon-barrel flavor."

What our editors thought:

"Deep butterscotch, toffee in the aroma with a bit of sugar wafer cookie and a slight boozy back note. Energetic in the sip with a zippy carbonation that pulls out leather and vague dark fruit before diving into a bitter chocolate finish."

ABV: 13.3% **IBUs:** N/A
Loc: Los Angeles



Jackie O's The Art of Lollygagging

97

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Brewed with Bloody Butcher corn and aged in bourbon barrels for 18 months."

What our reviewers thought:

"Prominent bourbon barrel in the aroma with vanilla, caramel, almond toffee, sherry notes. Layers of caramel, treacle, turbinado, biscuits with hints of dried dates, figs. Excellent chocolate-malt character and upfront sweetness with slightly bitter linger on the finish."

What our editors thought:

"Classic nose with leather, licorice, root beer, bits of dark caramel. Deep in tone yet light on the tongue as the same notes push and pull in the sip. Remarkably dynamic."

ABV: 13.1% IBUs: N/A

Loc: Athens, OH



Lumberbeard Island Otter

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Whiskey barrel-aged barleywine with vanilla and macadamia nuts."

What our reviewers thought:

"Huge vanilla in the nose evokes hints of marshmallow, vanilla nougat, vanilla ice cream with hints of toffee, caramel, macadamia nut, chocolate to balance. The macadamia-nut and vanilla interaction distracts you from the hefty booze notes."

What our editors thought:

"Big marshmallow, white chocolate, and nutty tones in the aroma with a boozy butterscotch edge. Less sweet in the flavor than the aroma implies, with a broad nutty midtone and chocolate undertones to balance the sweeter vanilla highs."

ABV: 14.7% IBUs: N/A

Loc: Spokane, WA



Mikerphone Yakety Yak

90

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "Blend of English barleywines aged in wheat whiskey then Armagnac barrels."

What our reviewers thought:

"Burnt toffee and raisin, brandy and whiskey, vanilla and wood in the aroma. Complex and interesting with tobacco, toffee, chocolate. Slight candied grape, whiskey, and chocolate in the medium-long finish."

What our editors thought:

"Big barrel notes in the aroma with just a touch of dark fruit and a zippy ethanol whirr. Dark and fruity in the flavor, chocolate power chords with dark and tropical fruits cut through by a wailing alcohol solo."

ABV: 16.9% IBUs: N/A

Loc: Elk Grove Village, IL



New Image Single Barrel Intent

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "Barleywine aged 15 months in Pedro Ximénez sherry barrels."

What our reviewers thought:

"Toffee, sherry, sweet vermouth notes in the nose with an almost peaty smoke note. Subtle caramel, light chocolate malt in the background. Sherry and vermouth notes are more balanced and restrained in the flavor. As the sip lingers, notes of vanilla and oak emerge."

What our editors thought:

"Faint red fruit, apple skin, cellar must, and sweet caramel notes in the aroma. Generally malt-forward with slight leather, a bit of pleasant oxidation, and an aged character."

ABV: 14.06% IBUs: N/A

Loc: Arvada, CO



Kros Strain Graven Maven Grand Cru

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Aromas and flavors of coconut, graham cracker, a hint of maple, oak, chocolate."

What our reviewers thought:

"Fudge, brownies, chocolate, cocoa powder. This may sound simple, but all the flavors are well-integrated and well-balanced. Barrel character is subdued and supports the main characters well. Hints of toffee, vanilla, stewed fruits. Flavor is balanced and warming."

What our editors thought:

"Spicy bourbon notes with a lively energy in the aroma. Refined bread crust, caramel, banana bread, and char siu pork notes in the sip for just the right balance."

ABV: 14% IBUs: 45

Loc: LaVista, NE



Lumberbeard Anniversary Year 4

92

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "A blend of 1-, 2-, 3-, and 4-year-old bourbon barrel-aged barleywine."

What our reviewers thought:

"Apple sweet bourbon on the nose with toffee and caramel. Sweet whiskey in the taste, nicely restrained by hop bitterness. Light cherry notes, bourbon, and a touch of apple in the medium-lasting finish. Substantial amount of alcohol warmth."

What our editors thought:

"Curious hop note in the aroma evokes apple and tropical fruit with a tea-like herbal underpinning, alongside the typical caramel and chocolate. Expressive fruity chocolate notes with an ethanol edge in the sip, airy and light."

ABV: 16.5% IBUs: N/A

Loc: Spokane, WA



New Image Arcane Intent

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "Barleywine aged 14 months in port-finished whiskey barrels."

What our reviewers thought:

"Earthy grassy-citrus and pine notes in the aroma blend with caramel, toffee, chocolate malt, a hint of boozy heat. In the sip, the barrel character's tannic note accentuates the bitter hop elements."

What our editors thought:

"Classic hops push through in the aroma, for an American feel with just a touch of vintage barrel. The bitterness carries through significantly in the sip, lean, with an austere barleywine intensity."

ABV: 14.1% IBUs: N/A

Loc: Arvada, CO



Old Thunder Very Rare Eagles

89

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Aged in 10-year Kentucky bourbon barrels for more than 38 months."

What our reviewers thought:

"Aroma conveys notes of caramel, leather, oak, with hints of rose, apple, pine, caramel malt. Flavor carries dark cherry and melted butter with a caramel base. Caramel malt notes provide a nice complement to the oak-derived vanillin. As it lingers on the palate, some apple-like tartness emerges."

What our editors thought:

"Caramel plums with a bit of sun-dried tomato in the aroma. Broadly chocolate in the sip with a wide body and just a touch of bitterness."

ABV: 14% IBUs: N/A

Loc: Pittsburgh



Our Mutual Friend Fixed Blade

91

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Barleywine aged 18 months in Laws Rye Whiskey barrels."

What our reviewers thought:

"Caramel, toasty chocolate, toffee notes greet the nose, with a hint of whiskey. Flavors of toffee, caramel, molasses, dark dried fruit. Some alcohol bite with a good amount of bitterness tempers the sweetness. Finish is relatively clean."

What our editors thought:

"Waffle cone, vanilla, a bit of cocoa powder in the aroma with a nutty undercurrent that unfolds in the flavor with a bit of herbal hop bitterness. Woody tannins help dry the body, with a full but focused finish."

ABV: 15.6% **IBUs:** N/A

Loc: Denver



pFriem Barrel Aged American Dark Strong

97

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Aromas of bourbon, dried plums, baking spices, with notes of pecans, caramel, fig jam, oak tannin."

What our reviewers thought:

"Lightly roasted aromas. Balance between coffee, fig, dates, and a yeast-driven ester. Oak complements the malt and yeast. Moderately strong sweetness leans toward bitter on the finish."

What our editors thought:

"Stunning nose with deep malt notes, slightly fruity fermentation esters with banana and berry skin, and a faint woody undertone. Soft but malty in the sip with very restrained barrel notes and a fluffy mouthfeel."

ABV: 11.8% **IBUs:** 45

Loc: Hood River, OR



Urban Roots All Possible Futures

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "A barleywine aged for two years in Staggy Jr. bourbon barrels."

What our reviewers thought:

"Big aromas of milk chocolate, tobacco, wood, bourbon. Flavor is a nice balance of red apple, barrel tannins, and milk chocolate. Medium spicy alcohol and rich dark-fruit and malt character."

What our editors thought:

"Tightly refined aroma with glimpses of stone fruit, cellar oak, marzipan, crème brûlée crust, and chocolate liqueur. Lighter in the sip than the aroma suggests, with a burnt bread crust bitterness, a full body with measured malt sweetness, and artfully integrated ethanol."

ABV: 14.5% **IBUs:** N/A

Loc: Sacramento, CA



Wandering Monsters BA Labyrinth

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Imperial brown ale aged in a Heaven Hill rye barrel."

What our reviewers thought:

"Rye-flecked, cream-filled Ding Dong on the nose with coconut and vanilla. Milk chocolate mixed with the barrel creates a rich German chocolate cake aroma. Boozy but infused with a depth of complex sweetness. Decadent but not cloying."

What our editors thought:

"Tannic oak-driven aroma with bits of coconut and chocolate. Rich caramel midtones in the flavor are amplified by the full body and lower carbonation, with tight and clean execution."

ABV: 13.7% **IBUs:** N/A

Loc: Cincinnati



Pax Verum Syllabus For Dreams to Come

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Stainless-aged barleywine using all Sugar Creek malt."

What our reviewers thought:

"Classic British malt body. Caramel, toffee, banana bread, golden raisin blend with earthy pine, dried fruit, hints of sherry in the nose. Caramel notes in the flavor counter a pine-like bitterness. Balanced finish with pleasant warming heat."

What our editors thought:

"Minimal aroma with slight floral-hop hints. Entirely malt-forward in the sip, with big classic English base malt notes, the vaguest fruitiness, and demure hop notes that impart the most subtle herbal and floral tinge."

ABV: 10% **IBUs:** 50

Loc: Lapel, IN



Sunriver Wood Series: Bourbon Barrel Barleywine

97

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "Notes of orange blossom, caramel candies, cherry cordials, vanilla Creamsicles."

What our reviewers thought:

"Pacific Northwest hops announce their citrus-and-pine presence. The same players sit on the flavor bench with bourbon oak barrel and smooth strong alcohol. A woody dry finish with lingering spice."

What our editors thought:

"Orange hop notes in the aroma with chocolate underpinning. Leans bitter but balanced in the sip, with woody and bitter chocolate notes, burnt bread crust, and just a hint of softening citrus before it dives into a dry tannin-forward finish."

ABV: 13.8% **IBUs:** 45

Loc: Sunriver, OR



Verboten Grow Old With You Reserve

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"English-style barleywine aged one year in a rye whiskey barrel, then one year in a honey whiskey barrel."

What our reviewers thought:

"Rich toffee, caramel, and nutty malt, date and figs, tart and dark cherries, roast and chocolate malt, spicy alcohol. Peppery rye, sweet honey, light milk chocolate, cognac."

What our editors thought:

"Oak dominates the aroma, with light vanilla and coconut tones. Sweeter tones hit first in the sip, but they give way to deeper, drier tannic and dark cacao notes."

ABV: 14.5% **IBUs:** N/A

Loc: Loveland, CO



Wayward Lane Quercus Reserve

91

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"English-style barleywine aged 25 months in a 14-year Elijah Craig cask."

What our reviewers thought:

"Medium-high chocolate malt, medium spicy alcohol, and a medium sweet finish. Big red-apple notes and caramel flavors. Bourbon barrel and caramel really come out in the nose."

What our editors thought:

"Chocolate, anise, burnt sugar, and just a touch of cinnamon spice in the aroma. Woody with deep caramel notes in the flavor, rich but defined."

ABV: 14.6% **IBUs:** N/A

Loc: Schoharie, NY





Epic Milk Stout

98

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "A sweet, creamy nitro stout with hints of roast chocolate, toffee, burnt marshmallow, and roasted nuts."

What our reviewers thought:

"Bittersweet chocolate and coffee on the nose; quite clean. Very smooth mouthfeel, reminiscent of an espresso with just a layer of milk foam. The dark malt chocolate and coffee flavors take center stage while the milk sugar supports. A pinch of cola and some coffee notes in the flavor. Brings to mind Jelly Belly's cappuccino-flavored jelly beans. Aftertaste is filled with creamy coffee flavors. Overall, it's a very drinkable, well-balanced milk stout with just enough of a bittersweet punch."

What our editors thought:

"Beautiful aroma with big notes of chicory coffee and rustic bread crust. The flavor is smooth and buffed with a toothy matte finish—chocolate, coffee, bready roasted malt, and a succinct bitterness that pulls it together in an understated finish. The light body offers just enough heft to balance the sharper elements while still optimizing for repeat pints. Deliciously simple with near perfect execution."

ABV: 5% **IBUs:** N/A

Loc: Salt Lake City

12 West Midnight Run

86

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 8

What the brewer says: "Roasty oatmeal stout finishes with chocolate notes and a slight bitterness."

What our reviewers thought:

"Bold dark-roast coffee notes dominate the aroma with dark-chocolate hints in the background. Initial sip lets some roast and chocolate-like malt sweetness come through, but that sweetness is quickly tempered by a somewhat heavy-handed coffee-forward bitterness that lingers."

What our editors thought:

"Roasty coffee nose with dank locker-room edges. The strong herbal notes over the coffee create a bit of scratchy static, and the disruption becomes quite noticeable in the small beer."

ABV: 5.3% **IBUs:** 30

Loc: Gilbert, AZ



Arizona Wilderness Superstition

86

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "Oatmeal stout brewed with Arizona-grown barley, locally roasted Peixoto coffee, Madagascar vanilla beans."

What our reviewers thought:

"Hints of chocolate, toffee, vanilla complement fresh-roasted coffee notes in the nose. In the flavor, coffee notes balance well with a slightly sweet body and light acidity. Subtle vanilla smooths out the flavors. Finish is a touch watery but still leaves you wanting another drink."

What our editors thought:

"Light and fruity coffee in the aroma with touches of apricot and baked dough. Surprisingly dry and slightly chalky with a spiky bitterness."

ABV: 6.5% **IBUs:** 30

Loc: Gilbert, AZ



Cloudburst Totally Oatally

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "A classic oatmeal stout brewed for us and like seven regulars!"

What our reviewers thought:

"Bold coffee, dark chocolate, and roast notes with a hint of smoke on the nose. The more restrained sip is balanced with an earthy bitterness that provides a pleasant counterpoint to the dark malt elements. Oatmeal adds chewy creaminess. Smooth sip finishes clean with a lingering roast note."

What our editors thought:

"Bready aroma with very light roasted malt edges. Full-bodied yet light, as it eschews sweetness for a generally bready body and faint roast bitterness."

ABV: 4.9% **IBUs:** 30

Loc: Seattle



Alternate Ending Jack's Revenge

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Oatmeal stout aged on amburana-wood spirals."

What our reviewers thought:

"Wood character adds an unmistakable cinnamon-spice character that balances the dark fruity sweetness and black malt roast on the finish. Subtle notes of chocolate, coffee, and roast in the aroma. Roast, chocolate, and coffee-like malt notes blend well with the woody, earthy cinnamon spice. Body supports the bold flavors. Finishes smooth and nicely spicy."

What our editors thought:

"Amburana notes dominate the aroma with a vanilla-cinnamon nexus. Very light-bodied, with tannic and carbonic prickles."

ABV: 5.6% **IBUs:** 32

Loc: Aberdeen, NJ



Blackbird Night Of The Living Peanut Butter

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Porter with peanut butter, cacao nibs, and marshmallow."

What our reviewers thought:

"Initial sniff bursts with vanilla, chocolate, and peanut butter. Hints of toasted coconut and roasted malt. Flavor delivers the same in a no-nonsense package that finishes dry. Smooth, surprisingly light body with a clean, firm bitterness that matches well with the sweetness."

What our editors thought:

"Gobs of peanut in the aroma, with a touch of Reese's Pieces chocolate shell. Reassuringly dry in the flavor, surprisingly light body, given the huge aroma, with a tight dark-chocolate bitterness."

ABV: 4% **IBUs:** N/A

Loc: Wake Forest, NC



Creature Comforts Oatmeal Stout

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Creamy rich flavor with notes of coffee, chocolate, malted-milk balls, toast"

What our reviewers thought:

"Great complexity for a small beer."

Light-roast coffee, baker's chocolate, and a hint of mint in the nose lead to a roast-forward but smooth sip. Finishes lightly dry, with balanced bitterness from both hops and roast character."

What our editors thought:

"Classic aroma with bits of milk chocolate, lightly husky roasted grain, and caramel apple. Big, round mouthfeel offers a bold presence for a small beer, with a chocolate bitterness that quickly dissipates in a clean finish. Classically concise."

ABV: 4.8% **IBUs:** N/A

Loc: Athens, GA



Crooked Culture Can I Pet that Dog?

96

AROMA: 11
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "Low octane with chocolate and caramel notes and a rich creamy finish."

What our reviewers thought: "Hints of dark chocolate and coffee on the nose with chocolate-milk sweetness reminiscent of a Yoo-hoo. A bitterness tempers the sweetness and makes it easy to keep sipping."

What our editors thought: "Crisp aroma with light coffee-like roast and a bit of caramel that carries into the sip as more flavor, less sweetness. The full body sneaks in with an initial heft that quickly resolves into a very lightly bitter finish, luxurious but rigorous."

ABV: 5% **IBUs:** 20
Loc: Cumming, GA



House Divided Whole Latte Love

86

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 8

What the brewer says: "A blonde ale with lactose and cold-brew coffee."

What our reviewers thought: "Subtle hints of light-roasted coffee, more caramel-forward and floral than you might expect, dance in the nose. Sip is an odd combination of lightly sweet, breadly malt, floral, and perfume-like hop bitterness and just a hint of coffee that emerges in the dry finish."

What our editors thought: "Light-roast coffee and hops combine for a surprisingly aggressive aroma with herbal, floral, and citrus notes. A bit funky in the sip with a strong bitterness and some green-apple notes."

ABV: 6% **IBUs:** 24
Loc: Ely, IA



Pax Verum Expand Your View

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "A porter with bourbon barrel-aged chocolate malt and some other favorite dark malts."

What our reviewers thought: "Light cherry and herbal hops come through on the nose, playing well with sweet bourbon-corn, dark roast, and chocolate. Finishes pleasantly and quickly. As it warms, some dark chocolate and coffee come out in the flavor."

What our editors thought: "Milk chocolate and light roast in the aroma, with a woody touch. Chocolate bitterness drives the sip while the silky mouthfeel draws an enticing line from start to finish."

ABV: 6.8% **IBUs:** N/A
Loc: Lapel, IN



Two Roads Espresso

89

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "Oatmeal stout with an Ethiopian/Sumatran blend of coffee beans."

What our reviewers thought: "Hints of roast malt and smoke complement dark-roast coffee in the nose. The coffee-imparted flavors (chocolaty, spicy, lightly fruity) blend well with the roast and burnt-caramel malt flavors, creating a well-balanced, complex, coffee-forward flavor profile. Finishes lightly dry with a pleasant bitterness."

What our editors thought: "Bold classic coffee aroma with peanut undertones that carry through into the flavor. Light in the sip with a faint sweetness and a whiff of husky malt."

ABV: 6.5% **IBUs:** N/A
Loc: Stratford, CT



Ever Grain Coffee and Flowers

88

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "Oatmeal milk stout conditioned on whole vanilla and coffee beans."

What our reviewers thought: "Has that dessert-for-breakfast nose that you love for the style. Leans into the vanilla with support from the underlying sweetness, and the coffee adds layers to the bitterness on the finish. Well-constructed with layers of stout, sweetness, and coffee that blend well throughout."

What our editors thought: "Chocolate with a slightly floral aroma and a touch of burnt caramel. Sweeter in the sip with very low roast and breadier malt notes carrying the weight."

ABV: 6.1% **IBUs:** 25
Loc: Camp Hill, PA



Pax Verum Dark Matter

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "Sweet stout with toasted coconut, coconut cream, and Madagascar vanilla."

What our reviewers thought: "Sweet coconut lifts nicely from the glass. Vanilla notes add to the sweetness. Pleasant, moderately sweet and silky-smooth body with a long, soft finish. Balanced sweetness with just a hint of roasty bitterness on the finish."

What our editors thought: "Low-key toasted sweetness in the aroma with nutty undertones and a floral vanilla top note. Rich but not sweet in the sip, satisfyingly drinkable while still a bit indulgent. A striking balance."

ABV: 7% **IBUs:** 34
Loc: Lapel, IN



Trophy Ground Up

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "A porter with Black & White Coffee Roasters coffee added."

What our reviewers thought: "Lovely light coffee creates a nose fit for a hipster café. Chocolate malt, roast coffee. Light body is spicy on the tongue from good carbonation and acrid notes. Light chocolate-malt sweetness plays a complementary role. Leaves the impression of a well-crafted cold brew in beer form."

What our editors thought: "Strong nutty and woody coffee notes in the aroma. Sharp roast bitterness in the sip resolves into an enticing nutty linger with just a hint of sweetness."

ABV: 6.4% **IBUs:** N/A
Loc: Raleigh, NC



Wise Man Merry World Breakfast Stout

86

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 8

What the brewer says: "Breakfast stout with coffee and cacao nibs."

What our reviewers thought: "Floral, fruity coffee aromas with hints of mint and dark chocolate. First taste has a pleasantly light, nutty sweetness, but it's quickly overtaken by significant roast bitterness that dominates through the finish. Chewy body and carbonation."

What our editors thought: "Slightly smoky note in the aroma, with a toasted herb and meat note. Smooth bitterness and slightly watery body in the sip feel underplayed after the bold nose."

ABV: 6.6% **IBUs:** 27
Loc: Winston-Salem, NC





GOAL Brewing Bibingka Latte

99

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Dessert stout treated with toasted coconut, Congolese vanilla beans, Mostra Philippine Heritage coffee beans."

What our reviewers thought:

"Assertive coconut and strong coffee hit the nose immediately. Almond Joy in a glass. It's positively wild, super-pungent. Dark chocolate, vanilla, coconut mingle in a complex dance. Sweet, chewy, and big but at the same time, silky smooth and pleasant. Slight cinnamon spice provides nice depth. Sweeter than grandma on a Christmas morning, but if you can get beyond the sweetness, this is a fantastic and refined beer with layers of flavors to love."

What our editors thought:

"Absolutely stunning coffee note in the aroma—macadamia nut with a tropical floral highlight—as well as loads of toasted coconut. Thick, sweet, and rich in the sip but boldly balanced with smoothly polished roast-coffee bitterness, gorgeous coconut caramel midtones, and a drinkability that belies its strength and sweetness. It's both indulgent and very drinkable, a potent and artful combination."

ABV: 11.7% **IBUs:** N/A
Loc: San Diego

AleSmith Speedway German Chocolate Cake

90

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "Rich flavors of coffee and semisweet chocolate. Delicate sweetness of toasted coconut and roasted pecans."

What our reviewers thought:

"Coffee, vanilla, cinnamon spice in the aroma. Burnt dark chocolate, coffee, and coconut in the flavor with subtle cherry and grape. Assertive alcohol warmth. Very chewy. Sweet, but the coffee and bitter chocolate really balance it."

What our editors thought:

"Sweet caramel and coconut in the aroma with a bit of bourbon vanilla edge. Energetic chocolate liqueur drives the flavor with a sharper presence that falls off into dark-chocolate bitterness."

ABV: 12% **IBUs:** 70
Loc: San Diego



Atrium Bean's

91

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Heavy notes of chocolate and vanilla with delicate blueberry and orange-peel acidity."

What our reviewers thought:

"Rich, inviting coffee aroma. Flavor leans into bright raspberry and blueberry flavors while the coffee aspect is much more subdued. Prickly carbonation, hop spiciness, and a touch of roast walnut lend a lively aspect to the mouthfeel."

What our editors thought:

"Strong classic coffee in the aroma with a slightly nutty tone that carries through into the flavor. Medium sweetness mellows the more astringent and bitter notes."

ABV: 11% **IBUs:** N/A
Loc: Louisville, KY



Creature Comforts Welcome, My Friends

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"An imperial stout made with 1000 Faces Coffee, roasted almonds, and Ugandan vanilla beans."

What our reviewers thought:

"Prominent coffee, chocolate, and Brazil nut aroma. Rich chocolate and fudge in the flavor. Sweet but not quite cloying. Dry nutty notes counteract the sweetness and combine with smooth roast coffee in a semisweet finish."

What our editors thought:

"Burnt caramel and roasted nuts in the aroma, with an almost marshmallow vanilla note. Those same notes pull through the sip, refined with a decadent but deliberate feel. Flamboyant, but tightly constructed."

ABV: 11.2% **IBUs:** N/A
Loc: Athens, GA



AleSmith Speedway Toasted Coconut Vietnamese Coffee

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Expect deep dark chocolate, nutty coconut, and a coffee-forward finish."

What our reviewers thought:

"All the things you want: massive roast character, layered dark-fruit malt sweetness, distinct and integrated additions, boozy finish. Toasted coconut notes blend with chocolate, coffee, and hints of vanilla. It's huge, but pleasant and warming from start to finish."

What our editors thought:

"Deep chocolate and toasted coconut aroma, rich and reserved. Dark yet smooth in the sip, with an unrepentant rounded bitterness that neatly controls the sweeter top notes."

ABV: 12% **IBUs:** 70
Loc: San Diego



The Big Friendly Smokey Joe

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial breakfast stout made with slow-smoked roasted coffee beans."

What our reviewers thought:

"Rich smoky flavor of meat, canned prune, light coffee, and chocolate. Smoked meat note carries into the flavor and blends nicely with the coffee. An odd but interesting dichotomy of flavors."

What our editors thought:

"Unusual aroma with strong meaty barbecue and coffee, akin to Franklin's Espresso BBQ Sauce on brisket. Sweet and savory BBQ sauce in the flavor with low notes that balance the fruitier highs. An adventurous experiment that works beautifully."

ABV: 11% **IBUs:** N/A
Loc: Oklahoma City



Crooked Stave Drip Line

89

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Stout brewed with Corvus Coffee."

What our reviewers thought:

"Light-roasted coffee notes mingle with vanilla, caramel, dried fruit, and milk chocolate to create the impression of sweetness in the nose. Those sweeter elements show up in the initial sip but are rather abruptly countered by a coffee-like bitterness that carries long into the finish. A hint of boozy warmth emerges late."

What our editors thought:

"Lighter dried tropical floral notes in the foreground with a zippy chocolate line in the aroma, like a tea-infused chocolate truffle. Plays the sweet-herbal balance well in the sip with a sunny warmth."

ABV: 7.5% **IBUs:** 15
Loc: Denver



Ever Grain Nor'easter

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Imperial porter brewed with maple and fig syrups, conditioned on whole vanilla and chestnuts."

What our reviewers thought:

"Rich hearty aroma of vanilla laced with dark fruity fig and nuts. Flavor evokes maple-nut ice cream. Alcohol and light bitterness provide balance. Dark malt and fig combine to suggest an aged boozier beer."

What our editors thought:

"Fluffy, marshmallow-like vanilla in the aroma with a hint of earthiness and a bit of dark fruit. Jovial and welcoming in the sip with a light fruitiness that softens the stronger roast malt. Lighter body, easier drinking."

ABV: 9% **IBUs:** 30

Loc: Camp Hill, PA



Heritage Hill Coconut Cluster

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial pastry stout brewed with milk sugar, conditioned on coconut cream, Tahitian vanilla beans, and Mexican cocoa nibs."

What our reviewers thought:

"Adjuncts combine to perpetuate the tropical party with hints of coconut, vanilla, cinnamon, peanut butter, and chocolate. A silky, almost creamy, mouthfeel. Definitely leans into the tropical coconut adventure."

What our editors thought:

"Deep tropical cocktail aroma with strong coconut notes and luscious chocolate. Very sweet in the flavor, indulgent, but just enough chocolate bitterness cleans it up in the finish."

ABV: 8.9% **IBUs:** 30

Loc: Pompey, NY



Ladd & Lass Deprived of Light

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Imperial stout with intense flavors of cacao, coconut, and vanilla."

What our reviewers thought:

"Rich vanilla aroma blends with hints of dark chocolate, caramel, coconut, and dried fruit. Chewy up front, with a semisweet chocolate profile balanced by coconut notes. Creamy finish with lingering layers of chocolate, nutmeg, vanilla, and fruitcake."

What our editors thought:

"A whiff of smoke blows off quickly, as toasty caramel and vanilla notes pull through. Sweet in the sip, but a creeping herbal bitterness balances without stealing the joy from the sweeter vanilla and caramel tones."

ABV: 12% **IBUs:** N/A

Loc: Seattle



Pure Project Meditative Moment

95

AROMA: 11
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial stout infused with organic coffee, vanilla beans, and cacao."

What our reviewers thought:

"Notes of roasted coffee, dried fruits, vanilla, dark chocolate, and blackberry create a compelling nose. In the sip, fudgy chocolate gives way to a blackberry tartness that is quickly supplanted by a roasted-coffee bitterness."

What our editors thought:

"Subtle coffee in the aroma with just a touch of pepper, light chocolate, and a floral vanilla note. Silky and rich in the flavor with billowing chocolate and vanilla highlights, smoothly refined and cohesive."

ABV: 12.5% **IBUs:** N/A

Loc: San Diego



False Idol OG Buff

90

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial stout with Madagascar vanilla beans."

What our reviewers thought:

"Sweet, smooth vanilla aroma, with a soft malt aroma of toast and chocolate behind the vanilla. Flavor features sweet, caramelized malt, smooth chocolate and coffee notes, and vanilla pastries. Quite sweet with vanilla amplifying the sweetness. Some dark cherry liqueur notes in the finish. A big dessert beer!"

What our editors thought:

"Marshmallow vanilla nose with extract pungency. Bittersweet flavor with a toasted-malt throughline and darker roast in the finish."

ABV: 13% **IBUs:** N/A

Loc: North Richland Hills, TX



House Divided Bring on the Night

89

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Roasty imperial stout rested on toasted coconut, cocoa nibs, and vanilla bean."

What our reviewers thought:

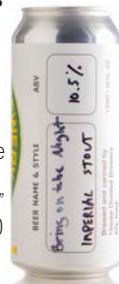
"Notes of sherry and coconut lead into a flavor profile dominated by the same. Really nice fudgy barleywine-like aroma. A leathery aged taste of sherry and bourbon with coconut notes. Sharp alcohol edges. A rich sweetness throughout finishes with a bitterness to match. Very drinkable for a big beer."

What our editors thought:

"Strong hops aroma initially with slightly sweaty overtones but a fruity caramel sweet hint. Strong bitterness in the flavor overpowers the nuances of the aroma."

ABV: 10.5% **IBUs:** 80

Loc: Ely, IA



Outer Range Transition Season

89

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"Vanilla beans, marshmallow, toasted peanuts, and Fluffernutter."

What our reviewers thought:

"Soft nutty and vanilla notes on the nose. Peanut notes lead the flavor, creating an earthy, nutty sweetness supported by marshmallow, coffee notes and a healthy warmth that emerges late in the sip."

What our editors thought:

"Husky cacao and roasted peanuts in the aroma with a curious cool, restrained verve. A bit obvious and less refined in the sip, as the nutty notes meander."

ABV: 12% **IBUs:** N/A

Loc: Frisco, CO



Soul & Spirits The Weight: Chocolate Hazelnut

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Hazelnuts, brown sugar, and Ghanaian cocoa nibs give Nutella vibes."

What our reviewers thought:

"Nutty aroma and flavor as hazelnut is delivered in a featured but not overdone manner. European dark-chocolate flavor balances the dry nut notes. The chocolate, hazelnut, smooth malt, and alcohol make a nicely blended combination."

What our editors thought:

"Baker's chocolate in the nose with slightly floral overtones. Lower toned chocolate drives the flavor with roasty support, but the result is more drinking chocolate than dark coffee, and the lighter body keeps it lively."

ABV: 9.5% **IBUs:** N/A

Loc: Memphis, TN





Maplewood Barrel Aged Cuppa Cocoaanut

99

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Fruity waves of coconut and vanilla pair with notes of rich chocolate and coffee, all complemented by expressions from the barrel."

What our reviewers thought:

"Aromatics come across fudgy and decadent, complemented by hints of vanilla, coconut, and boozy heat. The sip is just as rich with a syrupy and thick chocolate character that is complemented by a coconut and vanilla note and a hint of coffee-like bitterness. Over-the-top decadent, chewy, and luscious without being completely cloying. The adjuncts add layers that you want to sit and dissect in front of a fireplace. The heat is slow to arrive but emerges in the finish, providing a pleasant spicy counterpoint to all the rich sweetness."

What our editors thought:

"Fudge-forward aroma with gorgeous nutty coffee and coconut tones wrapped inside, along with a soft hint of vanilla that's more accent than focus. Chewy in the sip with big, sweet coconut notes layered over some spicy chocolate with just enough tangy punch to avoid roasty bitterness. It's fully formed, pulling flavor from its various elements without relying on the standard playbook, balancing energy with repose, and basking in its own dynamic tension."

ABV: 13% **IBUs:** N/A
Loc: Chicago

Alma Mader Art of Confusion

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Conditioned on macadamia nuts, cacao nibs, and vanilla."

What our reviewers thought:

"Rich, complex aroma screams cocoa, macadamia nut, and vanilla. Cocoa, vanilla, and coconut blend smoothly with dark-roast coffee notes."

What our editors thought:

"Woody bourbon aroma with vanilla and an inviting higher-key nutty note for an almost nougat-like aromatic softness. Medium body is more flavor-forward than textured, with nutty midtones and a cacao nib smoothness that pulls the notes together."

ABV: 15% **IBUs:** N/A
Loc: Kansas City, MO



American Solera King Size Candy Bar

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Imperial stout aged in bourbon barrels with toasted coconut."

What our reviewers thought:

"Boozy vanilla and fudge-like chocolate on the nose with some roast character in the background. Chewy mouthfeel with chocolate, vanilla, and dried fruit."

What our editors thought:

"Overwhelming toasted coconut in the nose, with caramel and cookie tones that push into stroopwafel and Walker's shortbread, with a dark bourbon chocolate hit. Very sweet on the palate, but the coconut caramel midtones and deep chocolate offer just enough balance."

ABV: 13% **IBUs:** N/A
Loc: Tulsa, OK



Atrium Barrel Aged Honest Thief

94

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"BBA imperial stout with coffee, cacao nibs, cinnamon, and vanilla bean."

What our reviewers thought:

"Aroma features coffee strongly, with cinnamon and chocolate in the background. The flavor is more complex, with cinnamon and chocolate balancing the coffee, vanilla in a supporting role. Undertones of sweet pipe tobacco. Alcohol is evident but not harsh. Wonderfully balanced."

What our editors thought:

"Spicy Turkish coffee in the aroma with just a touch of green pepper. Peppery in the flavor with a bit of pistachio. Thick, but dry."

ABV: 14.2% **IBUs:** N/A
Loc: Louisville, KY



Alternate Ending Carolyn's Wings

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Rye barrel-aged imperial stout conditioned with cinnamon and coffee."

What our reviewers thought:

"Rye bourbon notes lead in the aroma, followed by coffee roast, light caramel, chocolate, and notes of fig, dark cherry, and raisin. The flavor is where this beer shines:

cooked sugar, ribbon candy, and spice from the rye that adds to the richness."

What our editors thought:

"Barrel and spice with a slight green-wood edge in the aroma. Deeper in the flavor with strong cinnamon and a deceptively light texture that almost effervesces off the palate."

ABV: 11.2% **IBUs:** 36
Loc: Aberdeen, NJ



Arizona Wilderness Secret Sympathies

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial stout aged in rum barrels, with lemon, lime, orange peel, vanilla, cinnamon, allspice, and kola nut."

What our reviewers thought:

"Citrus in the nose blends with cola, ginger, and cinnamon. A citric punch, spicy botanicals, and bittering cola-like flavor balance sweet chocolate and vanilla. A firm boozy warmth emerges late in the sip. Would feel at home in a tropical tiki bar."

What our editors thought:

"Shockingly fresh and unexpected citrus in the aroma with a minty herbal, almost cocktail-like, depth. Hefty in the sip with a full body highlighted by quirky but cool cola and lemon."

ABV: 10.4% **IBUs:** N/A
Loc: Gilbert, AZ



The Big Friendly Coconut Boom

89

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial stout aged in rum barrels with toasted coconut added."

What our reviewers thought:

"Coconut and chocolate notes in the nose with hints of caramel and toast. Reminiscent of the Girl Scout Samoas. Some dark plum. The flavor is a big hit of candy sweetness with coconut and chocolate. A fluid version of a candy bar dipped in rum."

What our editors thought:

"Coconut nose with hints of banana and some deeper roasted malt. Sweet and nutty on the palate with palpable boozy heat and a broad fruitiness."

ABV: 12.3% **IBUs:** N/A
Loc: Oklahoma City



BKS Shown the Light

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 8

What the brewer says: "Imperial stout aged in rye barrels and conditioned on vanilla beans."

What our reviewers thought: "Rye-like spice notes in the nose blend with marshmallow. The barrel is star of the sip with oaky tannin bitterness in the initial sip balanced by a pepper-like note and a boozy, sweet vanilla flavor that carries long into the finish."

What our editors thought: "Rich vanilla and oak aroma with a bit of wood shavings and cellar must. Beautifully expressed vanilla in the flavor with punchy and energetic dark chocolate notes that contrast against the very, very thick body."

ABV: 15% **IBUs:** N/A
Loc: Kansas City, MO



Brotherhood BA Space Debris Pecan, Vanilla & Coconut

88

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "With roasted pecans, vanilla beans, toasted and raw coconut."

What our reviewers thought: "Caramelized dark chocolate and vanilla dominate the aroma. The flavor has some soft spices, coconut, vanilla, even a touch of cinnamon and hazelnut."

What our editors thought: "Praline candy and vanilla in the aroma with some nutty coffee tones and a sharper ethanol buzz. Thick and sweet on the palate with a bold brown sugary nut character that overpowers the softer roast."

ABV: 14% **IBUs:** N/A
Loc: Mokena, IL



Cerebral Gravity Well

91

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "Aged in a single Weller bourbon barrel. Conditioned on toasted hazelnuts."

What our reviewers thought: "Hints of bourbon, soy sauce, chocolate, sherry-like dried-fruit notes in the nose. A subtle earthy nuttiness in the initial sip is complemented by rich chocolate and spicy vanilla."

The warmth emerges in the finish, with a spicy note reminiscent of root beer."

What our editors thought: "Husky cacao in the aroma with low-key roasted nutty tones. A touch ruddy in the sip with strong nutty notes and lighter floral highlights that pull the focus in multiple directions."

ABV: 13.3% **IBUs:** N/A
Loc: Denver



Cinderlands Douse: Bourbon Vanilla

93

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Imperial stout aged in bourbon casks, blended with a double-oaked stout, then drenched in vanilla bean."

What our reviewers thought: "Rich aroma features barrel character front and center with vanilla, coconut, oak, and cherry. Flavor bomb of richness: brown bread, deep rich chocolate, espresso. Lovely complexity of vanilla, buttery oak, and sweet cherry without being too bourbon-forward. Finishes sweet but not cloying."

What our editors thought: "Younger bourbon note in the aroma, lively with fresher oak and a bit of vanilla. Firm chocolate and caramel notes in the sip with a bit of tannic berry skin."

ABV: 13.7% **IBUs:** 60
Loc: Pittsburgh



Brotherhood Barrel-Aged Space Debris

91

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 8

What the brewer says: "Roasted hazelnuts, vanilla beans, cocoa nibs, toasted and raw coconut."

What our reviewers thought: "Mounds-bar aroma of chocolate, coconut, vanilla, nuts. The flavor follows the aroma, wrapped in a sweet envelope of smooth, mild bourbon."

What our editors thought: "Sweeter top notes of toasted coconut and vanilla play against defined bourbon chocolate underneath in a satisfying push-pull. Candy-bar notes find their groove against the deeper roast in the sip, settling into riffs softened by chocolate."

ABV: 14% **IBUs:** N/A
Loc: Mokena, IL



Brown Truck Bourbon BA Truck Blood

91

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Red velvet cake-inspired imperial stout brewed with cacao beans and aged in a bourbon barrel."

What our reviewers thought: "Bright boozy aroma with chocolate, light coffee, toast, date, and raisin. Flavor is like chocolate syrup (not quite as sweet) with a shot of bourbon. Light vanilla and cherry. Sweet chocolate finish lingers a long time."

What our editors thought: "Citrus and forest hop notes in the aroma with some spicy herbal chocolate undertones. Sweeter but decidedly American in the flavor, with prominent hop flavor and bitterness, unusual for the style but cohesive in context."

ABV: 13.2% **IBUs:** N/A
Loc: High Point, NC



Cerebral Here Be Monsters with Vanilla

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "Aged in a single rye whiskey barrel. Conditioned on a blend of vanilla beans."

What our reviewers thought: "Vanilla, whiskey, and dark rye bread in the aroma and flavor, with some dark chocolate and coffee notes. Thick, chewy, substantial, and smooth, finishing off with a pleasant, woody whiskey bite in the finish."

What our editors thought: "Deep, resounding aroma with spacious vanilla and oak notes over subtle refined dark chocolate. Beautiful balance in the lower midtones with floral vanilla peaks over tightly tuned revs of chocolate and caramel."

ABV: 12.9% **IBUs:** N/A
Loc: Denver



Epic Big Bad Baptist Black Gold

86

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says: "Flavors only attainable through true craftsmanship and patience."

What our reviewers thought: "Smells like a freshly poured Italian espresso. An unexpected banana ester on the nose nicely complements caramel and brown sugar. Taste is also coffee-centric, like a Cuban coffee, laced with caramelized sugar. Minimal barrel and aged character."

What our editors thought: "Deep aged barrel tones in the aroma with tanned leather, chocolate muffin, and a bit of anise. Nutty coffee in the flavor with a strong boozy finish."

ABV: 14.7% **IBUs:** N/A
Loc: Salt Lake City



Fonta Flora For The Share (Oreo Cookie)

93

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Conditioned on Oreo cookies."

What our reviewers thought:

"Oak, boozy aromatics blend with dark chocolate and vanilla notes. Initial sip has a chocolate sweetness and a vanilla note. As the sip sits on the tongue, oaky spiciness and boozy warmth balance the sweetness."

What our editors thought:

"Deep chocolate, bourbon, and stewed dark-fruit notes in the aroma with a booming bass. Sweeter in the sip with strong sugar high notes and caramel midtones. Plush and luxurious."

ABV: 14% **IBUs:** N/A
Loc: Nebo, NC



Good Land Brewing Café Mexicano XO

86

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"Imperial stout aged in ex-tequila barrels, then blended with freshly roasted coffee and cinnamon."

What our reviewers thought:

"Cinnamon dominates the nose, continues into the sip, and on through the finish. Coffee is noticeable but plays second chair with chocolate, caramel, vanilla notes. A green-pepper note on the finish. Boozy heat is restrained and enhances the cinnamon spiciness."

What our editors thought:

"Big coffee and cinnamon in the aroma, with just a touch of pepper. Spice drives the sip with a drying tannic quality, highlighting the woodiness with light body and low sweetness."

ABV: 13.1% **IBUs:** N/A
Loc: Traralgon East, Victoria, Australia



Highland Park Grand Paradise

88

AROMA: 11
APPEARANCE: 2
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"With cacao nibs, coconut, and vanilla."

What our reviewers thought:

"Aroma of unsweetened chocolate, espresso, light vanilla, coconut, and light honey. Bourbon aroma adds punch. Flavor is first and foremost about sweet chocolate. Coconut comes through nicely in the finish. Thick and chewy."

What our editors thought:

"Citrusy hop notes in the aroma give a tropical dimension to the coconut and vanilla, while in the sip those same hops offer a bit of herbal bitterness in lieu of sharper dark roast malts. Buoyant and fresh."

ABV: 14.3% **IBUs:** N/A
Loc: Los Angeles



Kills Boro Crown of Care Coconut + Vanilla

92

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Smooth, lush, and unapologetically coconut."

What our reviewers thought:

"Vanilla, dark chocolate, coconut, and bourbon hit the nose immediately. Big, smooth, velvety and chewy, the flavor is primarily of coffee, vanilla latte, coconut, toffee, and barrel notes. A very enjoyable, complex imperial stout."

What our editors thought:

"Dark chocolate, a bit of stroopwafel, and sharper dark malt notes in the aroma. Sweet and round in the sip, more milk chocolate with rich coconut and caramel for a liquid Samoa-cookie feel. Just a bit of dark chocolate bitterness."

ABV: 13.5% **IBUs:** N/A
Loc: Staten Island, NY



Forgotten Road M 3rd 25th: Forever Fight

93

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"We added coffee, maple syrup, and vanilla to our barrel-aged big stout."

What our reviewers thought:

"Wake up!" shouts the aroma. "We have coffee and maple pancakes!" (And some chocolate syrup.) The sweet flavor echoes the aroma: coffee, maple, and chocolate. An assertive bitterness (barely) keeps the sweetness from being cloying."

What our editors thought:

"Evocative nose with nutty coffee tones and a wide range from deep roast and chocolate through maple and vanilla highs. Vibrant chocolate and coffee build a base in the sip with a round but punctual bitterness that contrasts with the more indulgent elements."

ABV: 14.3% **IBUs:** 50
Loc: Graham, NC



Highland Park BA Griffith 10th Anniversary

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Coffee rounds out the flavor profile with blueberry, melon, and jasmine notes."

What our reviewers thought:

"Vanilla, coffee, dark chocolate in the aroma. Hint of dark fruit. Flavor is primarily dark chocolate, coffee, vanilla with bitter licorice, toffee, tobacco."

What our editors thought:

"Freeze-dried berries, light almond, lemon zest, and some coffee offer a unique aroma and carry through into the flavor with a tangy punch, while refined anise and roast low notes bolster the low end, and fresh top notes give a new twist to the familiar form."

ABV: 13.5% **IBUs:** N/A
Loc: Los Angeles



Humble Sea Death by Paradise

92

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Finished on raw and toasted coconut, toasted almonds, vanilla beans, coffee."

What our reviewers thought:

"Chocolate, coconut, vanilla greet the nose. Sweet German-chocolate notes hit the tongue. Thick, chewy, velvety. As it warms, big, sweet flavors with spicy rye notes in back."

What our editors thought:

"Coconut top notes get a firm girding with nutty and chocolaty coffee in the aroma. The sip leads with a coconut sweetness, but the nut and midtone fresh-ground-coffee notes build a pleasant dynamic range."

ABV: 13% **IBUs:** N/A
Loc: Santa Cruz, CA



Kills Boro Crown of Care Wild Thai Banana

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Aged in rye barrels. Conditioned on wild Thai bananas. Notes of caramel and banana bread."

What our reviewers thought:

"The first sniff opens with dark chocolate followed by a hint of banana peel, which comes across as if you added banana to your dessert and poured on chocolaty goodness. Flavors are balanced with just a touch of a rye-spice character."

What our editors thought:

"Banana, yes, but a light herbal freshness in the aroma. Sweet with the expected fruit in the sip, moderate barrel notes, and a surging chocolate bitterness in the finish."

ABV: 13.5% **IBUs:** N/A
Loc: Staten Island, NY



Maplewood Barrel Aged Cuppa B&B

87

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says: "This barrel-aged stout is a remarkable expression of barrel, beer, and coffee."

What our reviewers thought: "Oak barrel and bourbon sing in the aroma with an undertone of smooth coffee roast, chocolate, caramel. The flavor features smooth aged bourbon. While the bourbon is the star of the show, the underlying beer has flavorful cocoa and coffee notes, subtle vanilla notes, and a boozy warmth."

What our editors thought: "Bold coffee and liqueur in the aroma, boozy and enigmatic with flashes of dark fruit. Roasted coffee layers over roasted malt for a double hit of dark in the sip."

ABV: 13% **IBUs:** N/A
Loc: Chicago



pFriem Maple Barrel Aged Smoked Porter

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Cozy notes of pecan pie, rich toffee, and dark chocolate delight the palate."

What our reviewers thought: "Smooth bourbon with rich vanilla and cream aroma and flavor. Evokes decadent German chocolate cake doused in bourbon. Dark plum, chocolate, and bourbon. Despite the rich flavors, the beer is not overly sweet. Intriguing."

What our editors thought: "Fruit wood and smoky notes in the aroma, round with subtle stone-fruit edges. Light but balanced in the sip, less overtly smoky with friendly milk chocolate and a subdued barrel. A pinot noir in a world of big cabs."

ABV: 9.1% **IBUs:** 45
Loc: Hood River, OR



PINTA Barrel Superiority Imperial Porter

93

AROMA: 12
APPEARANCE: 2
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "With cocoa nibs, maple syrup, and cinnamon aged in bourbon and rum barrels."

What our reviewers thought: "Subtle spicy, fudgy, and alcoholic aroma. Totally tastes like a dark fruitcake soaked in rum and bourbon. A fun and flavorful beer with spicy fruity flavors and smooth alcohol. Big and full-bodied with a sweetness throughout."

What our editors thought: "Sweet and spicy aroma with strong barrel notes and musty cinnamon with a floral highlight. Strong Mexican-style hot chocolate vibe in the flavor, medium sweet but not too thick, with minimal bitterness."

ABV: 12% **IBUs:** N/A
Loc: Województwo Śląskie, Poland



Sunriver Wood Series: Chocolate Ice Cream

88

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Infused with the flavors of chocolate ice cream, gooey marshmallow swirls, caramel, and fudge finish."

What our reviewers thought: "Roast, vanilla, chocolate, and bourbon in the aroma. Flavor is sweet and smooth chocolate syrup. Bourbon barrel and alcohol are evident in the sweet finish."

What our editors thought: "Round, mellow creamy chocolate notes in the aroma, with only the slightest oak and bourbon tones. Bouncy in the sip with punchy chocolate notes, a medium-light body, slight oak and spirit flavors, and a brisk roast bitterness as it lingers."

ABV: 13.4% **IBUs:** 40
Loc: Sunriver, OR



Moksa Barrel Aged Squanderous

89

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 10

What the brewer says: "Infused with toasted pecans, coconut, cacao nibs, vanilla beans."

What our reviewers thought: "Deep coconut-chocolate candy bar in the nose. A big, sweet vanilla-chocolate-coconut flavor bomb. Sweet and syrupy. A festival-pour type beer."

What our editors thought: "Inky alligator-char whiskey nose with a bit of cinnamon and tannic spice alongside the strong toasted coconut and vanilla that boost sweetness in the flavor. The rather strong bourbon booziness boosts contrast in the sweeter notes."

ABV: 13.8% **IBUs:** N/A
Loc: Rocklin, CA



PINTA Barrel Liberty

98

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "BBA imperial stout with vanilla, coconut, and barrel-aged Brazilian coffee."

What our reviewers thought: "In the aroma, vanilla, bourbon, milk chocolate, and coconut balance the robust coffee notes. A fudge-like chocolate note complements the earthy coconut and vanilla flavors. A boozy, rich finish."

What our editors thought: "Coffee in the aroma takes on a rich nutty tone, accented by refined and rich coconut and vanilla with a confident flair. Hefty in the sip without slowing down, as the pervasive sweetness is cut by a slight dark-chocolate note that isn't quite bitter."

ABV: 12% **IBUs:** N/A
Loc: Województwo Śląskie, Poland



Pivotal Dr. Darkness

88

AROMA: 11
APPEARANCE: 2
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Aroma of cocoa powder, dried fruits, molasses, bourbon-soaked raisins. Flavors of vanilla, bourbon oak, cola, brown sugar, Hershey's syrup."

What our reviewers thought: "Dark chocolate and cola aromas with a spicy note and a subtle nuttiness. Chocolate malt with a caramel backbone gives way to fig and raisin. Bourbon and buttery oak flavors complement this straightforward and drinkable beer. Long semisweet finish."

What our editors thought: "Cola note in the aroma with a touch of stone fruit. Woody but a bit rough in the sip with light caramel and chocolate notes and unrefined barrel."

ABV: 12% **IBUs:** 10
Loc: Bristol, RI



Verboten BA Others in Darkness: Irish Coffee

88

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says: "BBA imperial stout with barrel-aged coffee and lactose added."

What our reviewers thought: "Concentrated coffee and tobacco in the nose. Burnt caramel and dark-roasted coffee dominate the flavor. Light chocolate and a slight citrus freshness toward the end. Sweetness is nicely balanced with the dark-roast flavors that linger on the tongue."

What our editors thought: "Fruity coffee in the aroma drives some higher notes in the aroma, but the mid-tones feel EQ'd out while the roasty bass booms. Chocolate drives the flavor with just a glimpse of coffee, while the barrel fades into the background."

ABV: 15.5% **IBUs:** N/A
Loc: Loveland, CO



Wandering Monsters DOS: White Chocolate

89

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "BBA imperial stout with macadamia nuts, chocolate, and vanilla added."

What our reviewers thought:

"A wildly rich experience with bourbon taking center stage. Strong but smooth alcohol delivers chocolate richness backed with prune, figs, and a soft vanilla backbone. It's like those liqueur-filled chocolates, but in bulk."

What our editors thought: "Bourbon with a bit of brandy frames sweet, nutty vanilla in the aroma. Bold, deep malt notes in the sip hit with a strong bitterness and sweet rounded edge while the acidity from the malt hones its edge."

ABV: 13% **IBUs:** N/A
Loc: Cincinnati



Alternate Ending A Beautiful Friendship

90

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Bourbon barrel-aged imperial stout blend."

What our reviewers thought:

"Wood-aged aromas with rum, spice, chocolate, burnt toffee, coffee. Some green apple and roasted green pepper. Flavor is more balanced, with sweet milk-chocolate character that isn't overpowered by the bourbon barrel."

What our editors thought: "Curious citrus-hop notes in the aroma, with some stone-fruit malt, fermentation hints, and oak barrel. Hops structure the sip, with light herbal bitterness in place of roast malt. Friendly, lighthearted take."

ABV: 11.2% **IBUs:** 29
Loc: Aberdeen, NJ



False Idol Trespasser

87

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says: "Double bourbon barrel-aged imperial stout."

What our reviewers thought:

"The barrel is strong on this one, but the nose is more rye or Canadian whiskey. As it warms, more bourbon comes out, with stout in the back. It's boozy and warming, with the stout tossing in a bit of roast, more in the very front and in the finish."

What our editors thought: "Deep, leathery bourbon and dark chocolate in the aroma, with an inky boozy intensity. Nutty in the sip, with lighter chocolate notes—much more accessible than the nose suggests."

ABV: 15% **IBUs:** N/A
Loc: North Richland Hills, TX



Westbound & Down Coconut Justice

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Aged in bourbon barrels, finished on raw and toasted coconut."

What our reviewers thought:

"Big bourbon and oak aroma with buttery lactones, chocolate, and rummy fig. Very sweet and full with a restrained coconut and chocolate backbone. Esters of grape and fig support and complement the otherwise strong but smooth alcohol."

What our editors thought: "Attractive bourbon notes in the aroma with bits of oak, leather, and boozy chocolate. Fruity in the flavor with strong coconut and stroopwafel tones that defy its heft."

ABV: 14.9% **IBUs:** N/A
Loc: Idaho Springs, CO



Atrium Denny-Lou Blend 1

98

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Blended barrel-aged imperial stout. Bourbon barrel, rye barrel, and grape brandy barrels."

What our reviewers thought:

"With so many barrels to choose from, which to notice? The rye jumps up first, thrusting a spicy alcoholic warmth in the nose. The vanilla notes of the bourbon slide in along the edges, smoothly blending with the spiciness and a soft leathery chocolate flavor. The brandy barrel maybe comes out in the flavor, but honestly, they swirl together in a warming mélange that fits nicely with the sweet roast of the imperial stout. The alcohol cuts through the sweetness, making this an awesome winter warmer. And the complexity grows as it warms and invites the next drink."

What our editors thought: "Richly classic bourbon-barrel stout aroma with layers of charred oak, pecan, light stone-fruit ester, milk chocolate, and a touch of vanilla. Lighter in body than contemporaries, but the midtone nut-caramel thrust with gorgeous bourbon notes and a bit of dark fruit delivers satisfying flavor, and the vinous edge to the ethanol heat in the finish puts a bow on the decadence."

ABV: 15% **IBUs:** N/A
Loc: Louisville, KY

Cinderlands Beer Douse: Rye

89

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says: "Blend of imperial stouts aged in rye casks."

What our reviewers thought:

"Devil's food chocolate cake on the nose, with rye spiciness. Some cherry and liqueur-filled chocolate flavors with more rye spiciness and barrel tannins. A little on the bitter side. A bit hot and unbalanced."

What our editors thought:

"Layered nose with chocolate, a bit of amaro-like herbs, a faint sweet smokiness, and a bit of coffee-like roast. Grippy in the flavor as the initial sweet burst immediately resolves with a light tannic drying, highlighting smooth bitter malt below."

ABV: 13% **IBUs:** 65
Loc: Pittsburgh



Forgotten Road GSO Barrel Select

88

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 8

What the brewer says: "A rich thick beer that is perfect to finish the day sipping on."

What our reviewers thought:

"A powerful bourbon aroma of caramel and vanilla with black licorice and coffee. Big, sweet body with sambuca, bourbon, vanilla, crème brûlée, milk chocolate, plum, and dark cherry. Finishes with the perfect balance of sweetness and alcohol character. Easy to drink, despite the evident high alcohol."

What our editors thought:

"Toffee and dark fruit notes in the aroma with big oaky bourbon. Sweet, with nutty and welcoming coffee flavors and just enough smooth roast to balance."

ABV: 14% **IBUs:** 50
Loc: Graham, NC



Humble Sea Ryething Tides

94

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Aged in rye whiskey barrels."

What our reviewers thought:

"Fudgy chocolate on the nose. Dark chocolate molten lava cake with a flambé of rye whiskey. Some dark red fruits and hints of red wine. Enough rye-barrel character to add tannins and dark malts for bitterness. Complex, rich."

What our editors thought:

"Deep chocolate with slightly fruity malt notes in the aroma. Flavor hits the full spectrum from dark chocolate through burnt-sugar midtones, cherry and berry hints, and a warming whiskey note that lingers in the throat."

ABV: 14% **IBUs:** N/A
Loc: Santa Cruz, CA



Stodgy Griffin's Port Barrel Aged Imperial Stout

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Aged in a whiskey-finished port barrel."

What our reviewers thought:

"Decadent aroma of brownies, ruby port, figs, and brandy. Luscious taste profile with layers of burnt sugar, maraschino cherries, vanilla, dried dates, and a touch of cinnamon. Alcohol is big and bold, but not hot or harsh. Full-bodied and sweet, but not quite cloying."

What our editors thought:

"Lighter woody and nutty note in the aroma with just a hint of dark fruit. Vinous in the flavor, lighter body with a shortbread-cookie sweetness and swirling chocolate tones."

ABV: 13.4% **IBUs:** N/A
Loc: Fort Collins, CO



Westbound & Down Western Justice

86

AROMA: 12
APPEARANCE: 3
FLAVOR: 16
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"BBA imperial stout. Smooth, full bodied. Flavors and aromas of chocolate brownies, vanilla, espresso beans, and pralines."

What our reviewers thought:

"Aroma of chocolate, cherries, and black tea. Malty waves of chocolate, anise, and blackberries, with a substantial hop bitterness. Hoppiness helps counter the sweetness, but still borders on cloying. Finishes on some lighter notes of vanilla and oak. Surprisingly drinkable."

What our editors thought: "Smoky, meaty aroma with some crisp BBQ bark and a saucy sweet hint. Body is light with midtone malt thrust and sharper bitter roast that appears in the finish."

ABV: 15.3% **IBUs:** N/A
Loc: Idaho Springs, CO



TASTED: DRY STOUT & PORTER



Pax Verum Secret Meeting

98

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Notes of roast and coffee give the perception of a full-bodied stout, while being only a 'half' stout."

What our reviewers thought:

"Comes out of the gate strong with a hard-hitting bitter chocolate with hints of slightly burnt coffee. Very inviting roasty malt character. Finishes dry with a slight creamy topping and tastes like a brittle, crumbly, raisiny cookie. Love the intense flavors with none of the intensity in the mouthfeel or finish. A black-coffee lover's dream that includes a mocha note. Bitter, bold, and very drinkable."

What our editors thought:

"Beautiful amaretto and cacao-nib note in the aroma with a woody background and the faintest berry esters. Direct and uncomplicated in the flavor, with light chocolate and roast malt bitterness that cantilevers out from a light body in an impressive feat of engineering."

ABV: 4.2% **IBUs:** 37
Loc: Lapel, IN

Mikerphone Slappa Da Base Volume 2

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Blend of four barrel-aged imperial base stouts."

What our reviewers thought:

"Classic bourbon-barrel stout in a pleasant package. Bourbon notes up front, followed by oak mid tones, chased with dark fig and prune fruitiness wrapped in a cloak of smooth alcohol. Simple and delicious. Some might say the wood is a little overdone."

What our editors thought:

"Deep re-sounding barrel aroma with a bit of amaro and dark chocolate. Lower midtone sweetness in the sip with nutty and caramel aspects, restrained and focused."

ABV: 15.3% **IBUs:** N/A
Loc: Elk Grove Village, IL



Urban Roots Drown the Sun

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"An imperial stout aged in bourbon barrels."

What our reviewers thought:

"Chocolate frosting and bittersweet baking chocolate on the nose with molasses, brown sugar, and bourbon. Deep-chocolate flavors with some burnt-sugar and tobacco and a slight bitterness that balances, although it still leans sweet. Woody tannins create more balance."

What our editors thought:

"Vivid chocolate liqueur in the aroma with charred oak, walnut, hay, and vintage barn. Fruitier in the sip with peach and berry notes, milk chocolate and caramel, and a razor-sharp ethanol note that saturates."

ABV: 14.75% **IBUs:** N/A
Loc: Sacramento, CA



Wild West Angel's Share 2024

87

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"BBA imperial stout, non-adjuncted."

What our reviewers thought:

"In the nose, dark chocolate, vanilla, and fudge followed by a savory touch of soy sauce. An amaro-like flavor comes across spicy and leathery. Firm bourbon presence is obvious in the aroma and flavor. Straightforward, almost simple, flavor profile."

What our editors thought:

"Deep chocolate nose with an earthy base and endearing woody tones. A bit light in body, dry, with woody/husky grain character that feels more casual than deeply intentional."

ABV: 12% **IBUs:** 50
Loc: Chengdu, China



Bewilder Lord of the Ryes

88

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Brewed with three different ryes and select Chinook hops."

What our reviewers thought:

"Smells of dark chocolate, burnt sugar, molasses, and Nesquik. Quite sweet, with a milk-chocolate flavor, but finishes with a strong bitterness. The rye translates most evidently in the flavor, with the prominent spiciness, subtle roast character, and hop flavor taking center stage."

What our editors thought:

"Toasted-bread aroma with a touch of burnt crust. Chocolate muffin in the flavor, bouncy with an almost fluffy fullness and a light nutty finish."

ABV: 6.6% **IBUs:** 55

Loc: Salt Lake City



Great Lakes Conway's Irish Stout

91

AROMA: 9
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "Give a hearty sláinte with this rich and roasty dry Irish stout."

What our reviewers thought:

"Milk chocolate, light roast coffee, and smooth dark malt nose. A delectable roast and a touch of sweetness that balances. A smooth mouthfeel rounds out everything and makes this beer even more enjoyable. A perfect breakfast beer. An easy-drinking dry stout."

What our editors thought:

"Toasted bread crust with a hint of chocolate in the aroma. Dry and defined in the flavor with a strong but smooth chocolate bitterness, punchy carb, and light, sessionable body."

ABV: 4.8% **IBUs:** 40

Loc: Cleveland



Little Brother Jim's Lunch

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Roasty coffee notes mingle with toasted bread and walnut. Sweet plum and fig flavor."

What our reviewers thought:

"Soft roast-malt aroma: espresso, chocolate, fruity esters. Hint of earthy hop. Rich malt flavor: toast, sweet espresso, bread crust, chocolate. Light raisin and black currant. Very clean. Finishes mostly dry. Dark-roasted malt retains residual sweetness in the finish. Restrained hop bitterness."

What our editors thought:

"Husky roasted grain in the aroma with a bit of cacao nib. A touch sweet, but appropriately bitter chocolate flavor with purple-grape undertones."

ABV: 6.6% **IBUs:** 36

Loc: Greensboro, NC



Stone Imperial Stout

97

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "Coffee, black currant, and molasses support dark chocolate and heavy roast."

What our reviewers thought:

"Low-key aroma with hints of malted milk, chocolate, burnt sugar, spiced rum. Substantial maltiness with burnt-sugar notes. Appropriately dense body is somewhat soft. A sneaky hop bitterness pulls everything together. A bit of a throwback, resting on malts instead of adjuncts."

What our editors thought:

"Deep chocolate aroma with amaro herb notes, a bit of peach ester, toasted grain, and fresh rustic bread. Layered sip smoothly integrates sweeter caramel malt with roasted malt and a judicious hop note with some fruit and herbal bitterness."

ABV: 10.5% **IBUs:** 45

Loc: Escondido, CA



BlackStack Routine

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Just some good old-fashioned stout without any bells or whistles. Smooth and roasty-toasty."

What our reviewers thought:

"Delightful intense aroma of roasting coffee beans, dark cocoa, blackstrap molasses, and piney hops. Tasting mirrors the aroma and intensity: hops, roast, and molasses. Medium-bodied but well balanced by the bitterness. A very quaffable beer."

What our editors thought:

"Roasty nose with a toasted-grain warmth and a bit of caramel and hazelnut. Cooler in the flavor with chocolate midtones and a casual body."

ABV: 6.5% **IBUs:** N/A

Loc: St. Paul, MN



Heritage Hill Somewhere Sometime

86

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Semidry foreign export stout. Flavors of espresso, dark chocolate, undertones of dark fruit."

What our reviewers thought:

"Aroma of coffee, toast, and dark chocolate. Lightly smoky. Light raisin and black currant. Soft woody/cedar-like hop aroma. Very malt forward. Light raisin and blackstrap molasses flavors. Finishes mostly dry. Roast lingers and ends up a bit smoky. Hop bitterness shows up in the finish."

What our editors thought:

"Simple nutty aroma with a bit of darker roast malt. Chewy in the sip with a thick grainy middle and a light herbal bitter hop finish."

ABV: 6.5% **IBUs:** 58

Loc: Pompey, NY



Sideward Work Friends

92

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Notes of chocolate, roast, caramel."

What our reviewers thought:

"Strong malt and roast character in both the aroma and flavor. Slight herbal/citrus hop component comes through on the nose. Dark chocolate with slightly burnt malt and moderate hop bitterness in the background. Pleasant dry, roasty finish slowly dissipates. Drinks slightly light, but flavor complexity is there, and it's a tasty offering."

What our editors thought:

"Light woody hop aroma with a bit of dry grain and a touch of chocolate. Light in the sip, dry with a very refined and light bitterness. Cohesive in its understatement."

ABV: 4.8% **IBUs:** N/A

Loc: Orlando



Wallenpaupack Cosmic Trench

87

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Tropical stout brewed with molasses, crystal and roasted malts."

What our reviewers thought:

"Aroma of brown sugar, light coffee, toast with tropical-fruit notes. Flavor is smooth malt sweetness with dark coffee, light raisin, dates, black currant, fresh fig, plum. A distinct mince-pie vibe. Dark roast aids the hop bitterness, but still the balance is rather sweet."

What our editors thought:

"Strong guava and kiwi hop notes in the aroma give it an almost hazy black IPA feel. Full in the sip with intense fruit and roast flavors that compete for attention."

ABV: 8% **IBUs:** 40

Loc: Hawley, PA



ENGLISH & SCOTTISH ALES

AMBER, RED & BROWN ALES

MISC.



**Blackbird
You're Toast,
Mate!**

88



**Mickey Finn's
Wee Heavy**

96



**Crooked Stave
Road Tripper**

87



**Old Thunder
Abnormal
Beliefs**

89



**Wise Man
Outraged
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91



**Cerebral
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87



**Cloudburst
Distinctive
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86



**Narragansett
White Christ-
mas**

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**Pure Project
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**Yazoo Dos
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**Kros Strain
Barrelywine
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96



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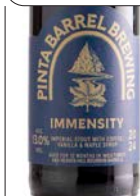
**Roaring Table
Four of Harts**

87



**Yazoo Nut
Brown**

91



**PINTA Barrel
Immensity**

91



**Firestone
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95



**Stodgy
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**House Divided
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**Sunriver Wood
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Narragansett White Christmas Winter Warmer

98

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"English-style winter warmer brewed with cherry, sweet orange peel, and ginger. Huge malty taste up front with notes of English toffee and dried fruits accented by the special ingredients with a hint of spice and citrus from the hops."

What our reviewers thought:

"Playful aroma of orange marmalade, chocolate, and honey. Delectable caramel and fresh-baked pie crust with a tinge of dried fruit. The flavor offers a slight alcohol presence and more of that dark-fruit richness, as well as some brown sugar and an interesting spice profile from ginger and orange peel. The hint of bitterness offers an excellent contrast. The combination of ginger and alcohol warmth offers a really pleasant mouthfeel that defines the idea of a winter warmer."

What our editors thought:

"Fresh aroma with expected breadly malt notes but a touch of lemon and an herbal brightness that belies its heft. Similarly nimble in the flavor, with a light chocolate herbal bitterness, only a hint of breadly malt sweetness around the edges, and a lemony tea flavor note that feels invigorating."

ABV: 7.4% IBUs: N/A

Loc: Rochester, NY

Blackbird You're Toast, Mate!

88

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Special bitter with Maris Otter and EKG."

What our reviewers thought:

"The nose offers a pleasant bouquet of malt, with blooms of caramel, toast, and cracker. That carries into the flavor with light pear and soft dough. Clean, dry finish. There's more backbone than expected from an English mild, but it's a nice drink."

What our editors thought:

"Fragrant nose with a bit of blackberry spice and toasted bread. Light in the sip with low bitterness and breadly malt with just a touch of honey and hop spice."

ABV: 3.8% IBUs: N/A

Loc: Wake Forest, NC



Deschutes Jubelale

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Features notes of spice, a robust malt character, hints of toffee and cocoa."

What our reviewers thought:

"Aroma offers dark fruit, graham cracker, burnt sugar, roasted malts, toffee, a touch of minerality, some Cascadian hops. Taste leads with caramel and graham cracker that are quickly countered by piney resin and a lasting hop bitterness that doesn't overpower the delectable dark fruits."

What our editors thought:

"Strong aroma with bits of peach, cherry, and red currant over honey-drenched toast. Big in the flavor as fruitier esters amplify the sweet malt with a significant chocolate bitterness."

ABV: 6.7% IBUs: 65

Loc: Bend, OR



Good Land 120 Shilling

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 20
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "BA Scotch ale. Flavors of dark fruit, sweet caramel, oak."

What our reviewers thought:

"Big red-apple and toffee aroma with notes of oak. Pastry malt and caramel flavors. Medium spicy alcohol, dates, figs. Low banana and pear esters. Rich toffee and caramel malt."

What our editors thought:

"Stunning aroma with peach, apricot, and red-apple flesh and skin, lighter malt whiskey, a hint of toffee and darker caramel tones, and glazed donut. Bold rye and pumpernickel bread notes in the flavor, significant hop and roast-malt bitterness, and a boozy berry note. Beautifully balanced, fearless."

ABV: 12.3% IBUs: N/A

Loc: Traralgon East, Victoria, Australia



Cloudburst Distinctive Holiday Ale

86

AROMA: 12
APPEARANCE: 3
FLAVOR: 16
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"A spiced winter warmer."

What our reviewers thought:

"Intense aroma of green cardamom, fennel, coriander, and horchata. Medium-bodied and sweet with caramelized honey that blends with a still spicy, but much less intense, taste. Surprising bitterness helps cut the sweetness. Warm, but not boozy. Finish is pleasant and balanced, and the body is interestingly soft."

What our editors thought:

"Strong aroma with a bit of anise, fennel, and spearmint. Full yet spicy in the sip as the bitter herbs steal the show with amaro-like aplomb."

ABV: 6.9% IBUs: 45

Loc: Seattle



Firestone Walker DBA

95

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"An innovative British pale ale that still stands the test of time."

What our reviewers thought:

"Light caramel and toast in the aroma with floral and a touch of citrus. On the tongue, earthy, slightly herbal hops with a hint of spice. The perfect kiss of bitterness to make this seem very sessionable."

What our editors thought:

"Beautiful toasty, nutty malt tones in the aroma with just a slight fruity-floral edge. A touch spicier in the sip, as a fine-grain herbal bitterness balances the malt through the sip into the neutral finish."

ABV: 5% IBUs: 30

Loc: Paso Robles, CA



Mickey Finn's Wee Heavy

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Intensely malty with notes of caramelized sugar, port, toasted bread, roasted nut."

What our reviewers thought:

"Heavy rich toffee, caramel, brown-sugar malt, faint roast malt, prune and raisin, hint of tobacco. Sweet malty flavor consisting of red apple, toffee, and tobacco. Dark-fruit acidity keeps this from being cloying."

What our editors thought:

"Dark fruit, toasty malt, a bit of fresh herbs and wildflower, and a vinous red-grape note in the aroma. Nutty malt lays over the big dark fruit in the flavor with a caramel sheen. Bold with just enough bitterness to balance."

ABV: 9.4% IBUs: N/A

Loc: Libertyville, IL



Solemn Oath The Telegraph

91

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Layers of caramel, dried fruit, and nuts balanced by a subtle earthy hop presence, full body, and prominent alcohol warmth."

What our reviewers thought: "Initial fruity esters (pear, apple) with toasted caramel malt, low toffee. Deep toffee malt aroma almost hints at bread pudding with roasted apples. Medium alcohol warmth and a pleasant carbonic bite. Good mouthfeel helps offset the alcohol level."

What our editors thought: "Lightly toasted nose with just a bit of dark-fruit ester, but restrained. Bold and evocative in the sip, but it leads without getting loose. Refined and powerful."
ABV: 8.5% **IBUs:** N/A
Loc: Naperville, IL



Wayward Lane Praxis

90

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "Highlights toasty malt and subtle fruity esters with a gentle touch of earthy hops."

What our reviewers thought: "Solid biscuit and light toast aroma. Soft floral and herbal hop. Biscuit and light toast flavor with a hint of bread crust. Floral and herbal hop profile, a bit spicy. Low fruity esters. Firm bitterness. Clean finish with lingering bitterness."

What our editors thought: "Wet-grain and wild-rice aroma, more cool than bread. Bouncier in the sip with lower bitterness, very light malt, and just a hint of bread without fruit around the edges. Light and buoyant."
ABV: 3.6% **IBUs:** 16
Loc: Schoharie, NY



Black Spruce Reginald Van Horn

86

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"Aged in a blend of Heaven Hill rye and Knob Creek bourbon barrels."

What our reviewers thought:

"Caramel and rye notes prominent in the aroma, with rich oaky bourbon and red licorice. Cherry, pear, and strawberry notes light up the palate followed by simple caramel that fades into smooth alcohol. Thin in the middle, surprisingly light for the style."

What our editors thought: "Sweet brown sugar and bread crust in the aroma, with just a hint of apple. Punchy tannins hit the palate with a lively carb and anise-like bitterness, with malt sweetness that creeps back into the boozy finish."

ABV: 13.5% **IBUs:** N/A
Loc: Fairbanks, AK



Kros Strain Barrelywine Vol.12 Bur- rowing Owl

96

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 10

What the brewer says: "Rich flavors and aromas of orange, oak, baker's chocolate, caramel, vanilla."

What our reviewers thought: "Buttery lactones combine with fig notes. Earthy tangerine and orange meld with hints of caramel, toffee, and leather. Luscious grape malt and dry caramel flavors, with a wild counter-play between syrupy malt sweetness and citric tartness. Hints of oak and vanilla."

What our editors thought: "Deep vinous aroma with subtle citrus glimpses. Rich and refined in the sip, big and muscular with sweet, glazed orange cinnamon-roll highlights."

ABV: 13% **IBUs:** 55
Loc: LaVista, NE



Stodgy Scottish Ale

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says: "A malty ale brewed with 100% Colorado-grown ingredients."

What our reviewers thought: "Some raisiny sweetness, a hint of mincemeat-pie filling, some delicious caramel notes, slight bourbon, a sticky syrup on the nose. Flavors of dried dark fruits and caramel richness. Initial sweetness is immediately backed up with a touch of dark malt bitterness and hoppy balance."

What our editors thought: "Bready with a touch of wildflower honey and a floral-blossom note in the aroma. Succinct in the flavor with a burnt bread-crust edge and low sweetness for this type, aiding in repeat drinkability."

ABV: 5.3% **IBUs:** N/A
Loc: Fort Collins, CO



Bewilder Weizenbock

94

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says: "The soft sweetness of wheat with pronounced yeast-derived aromatics."

What our reviewers thought: "Heavy nutmeg and cinnamon character with rich toasted malt, cooked bananas, and a slightly sweet yet spicy alcohol finish. Some notes of simple sugar mixed with caramel, and a floral hop finish. Big dark-wheat malt with notes of banana bread."

What our editors thought: "Expressive aroma with bits of expected banana and clove, but also spicy currant and fresh herbs. Strong, sweet malt with a banana tinge in the sip, but the light cocoa powder and herbs gently scrub for a tight finish."

ABV: 8.4% **IBUs:** 24
Loc: Salt Lake City



Cerebral À La Mode

87

AROMA: 12
APPEARANCE: 2
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Aged in a blend of apple brandy and rye whiskey barrels. Conditioned on cinnamon, pecan, and vanilla beans."

What our reviewers thought:

"Behind the chocolate and fudge, a subtle nuttiness followed by a gentle ester. Sweetness ends quickly with an abrupt bitterness—burnt coffee and chocolate with a lingering dry edge. A big and sweet beer full of spice and barrel flavor."

What our editors thought: "Strong oily, nutty nose with a confectioner-sugar sweetness and a bit of extract quality. Intensely nutty in the sip, but the strong midtones overpower the bass."

ABV: 14.3% **IBUs:** N/A
Loc: Denver



PINTA Barrel Immensity

91

AROMA: 12
APPEARANCE: 2
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Imperial stout with coffee, vanilla, and maple syrup. Aged in bourbon barrels."

What our reviewers thought: "Big cocoa-powder aroma, with notes of bourbon, coffee, vanilla in both aroma and flavor, steeped in a bed of dangerously smooth aged alcohol. Vanilla sweetness is rich and rounded, followed by some wood tannins. Finishes bittersweet."

What our editors thought: "Bready and caramel malt aroma with very light barrel notes. Silky in the sip, with strong bitter chocolate, a bit of barrel intensity, and a buffering dark caramel."

ABV: 13% **IBUs:** N/A
Loc: Województwo Śląskie, Poland



TASTED: MISCELLANEOUS

Sunriver Whiskey Barrel Ale

90

AROMA: 12
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Strong ale aged in sour-mash whiskey barrels."

What our reviewers thought:

"Big bourbon and oak aromas rush to the top of the glass. Refined whiskey flavor with clinging tannins, counterbalanced by caramel malt and pear esters; toffee and browned fruits play a supportive yet critical role."

What our editors thought:

"Fruiter nose with a touch of battered, deep-fried mushrooms. Hop-forward in the flavor with a gentle herbal-citrus bitterness and just a hint of barrel character."

ABV: 14.1% IBUs: 40

Loc: Sunriver, OR



TASTED: AMBER, BROWN & RED ALE



Lawson's Finest Liquids Mad River Maple

93

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Robust, rich maple ale loaded with 100% pure Vermont maple syrup. Smooth and palate-pleasing mouthfeel with a slightly sweet finish."

What our reviewers thought:

"Aroma filled with caramel and toffee with a lower level of toast, dried red fruits, and a sweet maple note. Interesting flavor profile of dusty grain, husky caramel, and earthiness. Maple-syrup sweetness is loud and proud. Settles into an overall dryness that finishes relatively cleanly and invites the next sip."

What our editors thought:

"Broad, fruity aroma with bits of daiquiri, nutty latte, mint, and lime. Sweet and chewy in the flavor, boldly malty with sweet bready notes and a tannic woody structure, but a tropical herbal finishing note that feels unexpected and fresh. Unusual and intriguing."

ABV: 8% IBUs: N/A

Loc: Waitsfield, VT

Crooked Stave Road Tripper

87

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Hoppy amber ale."

What our reviewers thought:

"Some bright grapefruit notes in the nose blend with a subtle malt character of bread crust and earthy wood. Earthy citrus notes continue into the flavor, balanced by a light, caramel-malt body. Resinous bitter notes emerge, linger into the next sip."

What our editors thought:

"Classic American-hops nose with bits of dry forest and brief citrus glints over a doughy malt foundation. Spiky, then loose, in the sip as the initial hop bitterness punches quick, then recedes into broad malt that fades into a lingering bitter finish."

ABV: 6% IBUs: N/A

Loc: Denver



Hazel Grove Cascadian Tuxedo

87

AROMA: 10
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"We taste toffee, dark chocolate, and toasted almonds. Slightly sweet on the nose but finishes relatively dry with Cascade-hop bitterness."

What our reviewers thought:

"Hoppy brown ale! Piney, garlicky, grassy hop aroma grabs your attention, then the sweet malt background comes through. Hop flavors almost as assertive as aromas, but nicely balanced by sweet, toasty, pie crusty malt. A brown pale ale."

What our editors thought:

"Murky nose with husky cacao nibs, a bit of lemon, and a vague sweet smoke. Herbal in the flavor with a pronounced roasty bitterness."

ABV: 6% IBUs: N/A

Loc: Pittsburgh



Wayward Lane Xylem

87

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"English-style wheatwine conditioned on amburana wood chips."

What our reviewers thought:

"Earthy cinnamon notes in the nose with vanilla and hints of caramel, nutmeg. The nutmeg note emerges in the flavor, accentuated by rum-like booze and earthy wood in the background. The wheat malt adds stark layers of spice—white pepper, clove, white grape. Brash, bold, and oddly interesting."

What our editors thought:

"Overpowering but stuffy spice notes in the nose. Sharp in the sip, with a strong ethanol note but fairly minimal malt and spice notes."

ABV: 12.5% IBUs: N/A

Loc: Schoharie, NY



Fonta Flora Bread Tree

92

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 10

What the brewer says:

"Brown ale brewed with local roasted American chestnuts."

What our reviewers thought:

"Soft toast, coffee, and pie-crust malt aroma. Light woody/earthy hops. Hints of raisin. Simple malt flavor of toast, sweet cocoa, and pie crust. Medium light malt sweetness with light dry apricot and fig esters. Light hop bitterness. Finishes off dry with lots of flavorful malt lingering."

What our editors thought:

"Restrained aroma with a tight nutty tones and just a hint of grape candy. Very slight sweetness in the sip softens the woody malt structure."

ABV: 5.5% IBUs: N/A

Loc: Nebo, NC



House Divided Nutville Brown Ale

92

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"A malty, brown caramel-centric British ale."

What our reviewers thought:

"Light coffee malt and hints of chocolate in the aroma. Background woody/floral hops with enough fruity esters to pique one's interest. Soft dried apricot. Coffee and dark chocolate in the malt dominate the flavor with a light sweetness in the finish. Balancing bitterness."

What our editors thought:

"Nutty coffee aroma with a hint of chocolate. Slightly bitter coffee in the sip, with a smooth cold-brew edge, and just a hint of bracing malt tannin."

ABV: 5.2% IBUs: 24

Loc: Ely, IA



Old Thunder Abnormal Beliefs

89

AROMA: 11
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Brown ale with Midwest barley malt, English caramel and chocolate malts, PNW hops."

What our reviewers thought:

"Initial aroma is citrus/grapefruit hops, with sweet malt hidden. Fruity esters round out the aroma. Citrus hops continue into the flavor, providing a light acidity that balances the medium-sweet, lightly toasted, dry malt flavor. Both flavors linger long into the finish. Balance swings hoppy."

What our editors thought:

"Ambiguously fruity aroma with bits of lemon and lime, but very little malt. Tight, focused bread-crust flavors linger with a slightly burnt crust and fruit finish."

ABV: 6.3% **IBUs:** N/A

Loc: Pittsburgh



Roaring Table Four of Harts

87

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 8

What the brewer says:

"Collaboration with Moderne Dune."

What our reviewers thought:

"Hop-forward aroma: resin, pine, grass, light black pepper. Pear and geranium esters. Low biscuit and toast malt. Hop notes fade as the malt becomes more dominant. Malt-forward flavor, with solid malty chocolate, toast, pie crust. Light hits of fig ester. Hop flavor of light cedar, but restrained. Finishes fairly dry, with malt lingering."

What our editors thought:

"Svelte nuttiness in the aroma with a slight papery note. Warm and rich in the flavor, medium-low chocolaty bitterness and a quick finish."

ABV: 5.25% **IBUs:** 22

Loc: Lake Zurich, IL



TailGate Cooler Nights Red Ale

87

AROMA: 12
APPEARANCE: 3
FLAVOR: 16
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Toasted nuts, light roast coffee, caramel, hints of cacao on the nose. Malty flavors and a gentle, citrusy hop note."

What our reviewers thought:

"Roast, biscuit, and toffee malt on the nose blend with some floral, herbal hop notes. Malt flavors of coffee, roast, and caramel are quickly overtaken by a healthy dose of floral and soapy bitterness that lingers into the finish."

What our editors thought:

"Deep bread-crust aroma with a slightly lemony top note. Heavy in the sip with a cocoa-like bitterness and meandering malt that seems bigger than it is."

ABV: 4.8% **IBUs:** 17

Loc: Nashville, TN



Yazoo Dos Perros

88

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Wonderfully bready malt aroma, balanced with some maize sweetness and a Noble-hop finish."

What our reviewers thought:

"Lightly toasted malt aroma, more drying than sweet. Light floral esters and hop aroma. Light body with background toast flavors. Malt sweetness very restrained, hops appropriately low. Finishes fairly dry. Very drinkable."

What our editors thought:

"Roasted-chestnut aroma with a bit of charred oak. Lighter in the flavor as a very slight corn note heightens the perceived sweetness and just a touch of hop bitterness keeps it in check."

ABV: 5.4% **IBUs:** 11

Loc: Madison, TN



Pure Project Red Rock Ridge

88

AROMA: 12
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 8

What the brewer says:

"Cascade hops and a blend of Pilsner, German Munich, and English Crystal malts."

What our reviewers thought:

"Bread crust, toast, hint of caramel malt balanced by floral, lightly soapy hops, a touch of fruity esters. Toffee, caramel sweetness counter a healthy dose of soapy, floral bitterness that lingers long into the finish."

What our editors thought:

"Classic, comforting aroma as citrus notes soften the sweeter malt with just a bit of bread dough behind. Engaging, modern in the sip as the light forest and citrus notes brace against the similarly light malt."

ABV: 5.5% **IBUs:** N/A

Loc: San Diego



Stodgy English Porter

87

AROMA: 11
APPEARANCE: 3
FLAVOR: 17
MOUTHFEEL: 4
OVERALL: 10

What the brewer says:

"Easy-drinking dark, malty beer with hints of toasted bread and chocolate."

What our reviewers thought:

"Roast and chocolate in the aroma. The flavor comprises light chocolate and coffee mingled with toast. Pleasant, smooth, and easy to drink with a great roast character that lingers on the tongue. Medium light body, medium finish."

What our editors thought:

"Round, mellow aroma with very subtle bready edges. Very light toasty malt in the sip with just a bit of nutty coffee flavor. Minimalist."

ABV: 4.8% **IBUs:** N/A

Loc: Fort Collins, CO



Wise Man Outraged Daughters

91

AROMA: 11
APPEARANCE: 3
FLAVOR: 19
MOUTHFEEL: 5
OVERALL: 9

What the brewer says:

"Traditional Irish red ale."

What our reviewers thought:

"A classic red-ale flavor profile with caramel and white bread maltiness. A heavy earthy-hop presence creates a balance that keeps the bold malt flavors in check. Toasty and perfect for a winter's eve. Nice for someone who wants something light with an assertively dry finish."

What our editors thought:

"Zippy toasted-malt aroma with a vague bready sweetness. Accessible flavor with soft, slightly citrusy, bready notes, low integrated bitterness, and a concise dry finish."

ABV: 5.4% **IBUs:** 25

Loc: Winston-Salem, NC



Yazoo Nut Brown Ale

91

AROMA: 12
APPEARANCE: 3
FLAVOR: 18
MOUTHFEEL: 4
OVERALL: 9

What the brewer says:

"Notes of chocolate and caramel, and a slightly roasty finish."

What our reviewers thought:

"Toasty, light, warming cocoa malt aroma. Soft floral/woody hops. Light dry apricot and fig esters. Malt-forward flavor: bread crust, biscuit, toast, brown bread. Soft floral hop with mild bitterness. Hints of apricot esters. Finishes toasty, fairly dry, malt lingers nicely."

What our editors thought:

"Beautiful broad, toasted bread-crust malt in the aroma, with light estery top notes. Refined and focused malt, lightly bready with very light bitterness and a well-appointed carbonation."

ABV: 4.8% **IBUs:** 21

Loc: Madison, TN





The 2024 Brewer's Retreat at Dogfish Head in Delaware. As we've noted before, this annual event is the highlight of our year and one that celebrates the camaraderie and communal spirit inherent in the craft-brewing world. At the end of October 2024, homebrewers and pro brewers from around the world gathered over three days to brew beer together, learn, and share. These photos capture only a slice of the experience. Clockwise from top left: group photo of featured brewers, attendees, sponsors, and staff; Henry Nguyen of Monkfish works with his brewing group; brewers present beers at the pairing dinner; Vinnie Cilurzo brought Russian River–selected hops to rub and share with his brewing group; Sam Calagione leads a discussion on brewing with spices; attendees “shop” for free takeaways from the spice bazaar in the Dogfish Head brewhouse; panelists Khristopher Johnson, Doug Reiser, and Vinnie Cilurzo discuss IPA. Tickets are on sale now for the **2025 Brewer's Retreat** hosted by Sierra Nevada in Asheville and Mills River, North Carolina. Learn more at brewersretreat.com.



PHOTOS, CLOCKWISE FROM TOP LEFT: JAMIE BOGNER (3); COURTESY DOGFISH HEAD (4)