



Craft Beer
GUIDE

Eco-Friendly Practices

Breweries are increasingly recognizing the need to minimize their environmental effect.

More and more breweries are implementing eco-friendly practices throughout the brewing process. They are sourcing local and innovative ingredients, reducing waste and conserving energy, focusing on organic practices and forming associations to help increase awareness and research. Sustainability has become a driving force within the craft beer industry.

SOURCING INGREDIENTS

Some breweries are embracing the concept of “local first” by sourcing their ingredients from nearby suppliers whenever possible. This reduces the carbon footprint associated with transportation and supports local farmers and growers. Many breweries will first buy locally grown hops, malted grains and even fruits and spices, allowing for a unique regional expression in their beers.

Others might source ingredients from further away, but focus on finding farms that follow sustainable and organic practices. Bang Brewery in Minneapolis has partnered with researchers at the University of Minnesota to use experimental crops. It’s part of a network of breweries that are trying out new reci-



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pes and techniques to use grains that are friendlier to the environment.

WATER CONSERVATION AND ENERGY EFFICIENCY

Water is a precious resource and breweries are implementing strategies to reduce their water consumption. Techniques such as optimizing brewing processes, monitoring water usage and implementing water-recycling systems help minimize waste and conserve. Additionally, breweries are exploring alternative water sources, such as

rainwater harvesting, to reduce reliance on traditional water supplies.

Other breweries are choosing ingredients, such as the West African grain fonio, that require less water to grow.

Craft breweries are adopting energy-efficient practices to reduce their carbon emissions and decrease their overall energy consumption. This includes implementing energy-efficient equipment, optimizing brewing schedules and using renewable energy sources. Some breweries are installing solar panels or investing in

wind energy to power their operations, further reducing their environmental footprint.

WASTE REDUCTION

Minimizing waste is a key aspect of sustainability in craft beer production. Breweries are implementing strategies to reduce, reuse and recycle waste materials. This includes initiatives such as composting spent grain, recycling packaging materials and using innovative technologies to re-purpose or recycle wastewater and solid waste. Some breweries even partner with local

farmers to provide spent grain as animal feed, further reducing waste and creating a circular economy.

Eco-friendly packaging can reduce the environmental effect of brewery products. Breweries are exploring lightweight and recyclable materials for cans, bottles and packaging components. Some are opting for innovative packaging alternatives, such as biodegradable six-pack rings or reusable growlers.

COMMUNITY ENGAGEMENT

Sustainability isn’t an individual effort. It takes community and collaboration.

Partnerships between breweries and community organizations harmonize everyone’s sustainability efforts. It gives people an opportunity to share knowledge and best practices and to gain access to resources that they might not be able to get otherwise.

For example, some breweries partner to make bulk purchases of hops and other ingredients that are sold in volumes too large for their individual needs.

Several sustainability certifications and industry initiatives have emerged to guide and recognize sustainable brewers. Initiatives like the Brewers Association Sustainability Benchmarking Tool, the B Corp certification or local and regional sustainability programs provide guidelines, resources and recognition for breweries committed to eco-friendly practices.

Pairing Craft Beer, Cuisine

Pairing isn't just for wine lovers — a great beer can make any meal better.

Certain flavors and characteristics in beer can complement or enhance the flavors of different types of food. While the ultimate guide should be an individual's taste, beer devotees recommend certain principles to help diners choose great beer to go with any food.

The Brewers Association has even released a two-page sheet to help drinkers match their favorite beers with the perfect foods.

BASIC PRINCIPLES

The Beer Connoisseur explains the reason behind pairing food and beer is to “create a combination that enhances both their flavors.”

How do you find that combination? The Brewing Association suggests three steps to matching beer with food: Match strength with strength; find harmonies; and consider sweetness, bitterness, carbonation, heat (spice) and richness. They are steps that can help you determine how the characteristics of both the beer and the food should harmonize and create a cohesive dining experience.

Pair your beer with food by bringing together complementary flavors. Light beer goes well with light or delicate flavors while a malty beer balances spicy or acidic food. A



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heavy beer goes well with rich food with striking flavors. Look for beers and food that bring together common aromas or flavor.

Some gourmands like to contrast flavors such as chocolatey stouts paired with briny oysters. The Beer Connoisseur warns that contrasting doesn't mean overpowering.

BEER STYLES AND FOOD MATCHES

It helps to know the flavor profiles of different beer styles when trying to figure out good food matches.

- **India Pale Ale (IPA):** IPAs have hop-forward flavor profiles, featuring strong bitterness and aromatic hop aromas. They pair well with spicy and bold-flavored foods as the hop bitterness helps cut through the heat. Pair it with spicy buffalo wings, Indian curries or Mexican tacos.

- **Wheat beer (Hefeweizen):** These are often cloudy with a fruity and refreshing character, so break them out when serving lighter dishes and salads. The banana and clove aromas can complement grilled chicken or seafood

dishes.

- **Stout:** Stouts are dark, rich and often feature roasted malt, chocolate and coffee. Their robust nature makes them a good match for desserts and hearty, flavorful dishes. Pair it with chocolate cake, tiramisu or grilled meats like steak or barbecued ribs.

- **Pilsner:** Pilsners are light, crisp and well-balanced lagers with clean, refreshing tastes that pair well with lighter, delicate flavors such as seafood dishes or milder cheeses, salads and lighter pasta dishes.

- **Amber ale:** These craft

beers offer a balance between malt sweetness and hop bitterness, making them a very versatile choice. The caramel and toasty flavors go well with grilled meats like burgers, sausages or barbecue. The malt-forward profile pairs well with caramelized vegetables or rich, savory stews.

Explore regional or cultural food pairings with specific beer styles. For example, try matching a British-style bitter with a mild English cheese or an Imperial IPA with smoked beef brisket or Southern-fried chicken.

A growing trend among craft beer enthusiasts for the past several years has been barrel-aged beers.

While technically not new — centuries ago, beer was aged in wooden barrels — it has been a technique more commonly associated with whiskey and wine. However, more breweries and home brewers are experimenting with creating beer that matures in barrels, absorbing the flavors and characteristics of the wood, as well as any residual spirits previously held within.

CraftBeer.com reports that barrel aging beer is a highly competitive and expensive segment of the industry that comes with high risks as it ties up product for an extended time in what is a very experimental process. Barrels can be hard to find and many small breweries don't have the space that it takes to rack them.

However, for those with the know-how and ability to invest, the result are beers that offer a complex taste adventure. Toast, a technology company supporting restaurants, listed barrel-aged beer as one of the top ten trends for beer in 2023, being especially popular in upscale taprooms.

ART OF BARREL AGING

Barrel aging is a process that involves aging beer in wooden barrels, typically made from oak. During this maturation period, the beer interacts with the wood, resulting in the extraction of flavors, aromas and tannins.



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Additionally, if the barrels were previously used to age spirits like bourbon, whiskey, rum or wine, the beer can absorb residual flavors from these alcoholic beverages, adding a layer of complexity and character.

BOURBON BARREL-AGED BEERS

Bourbon barrels are one of the more popular types of barrels used for aging beer. These charred oak barrels, previously used to age bourbon, impart rich flavors of caramel, vanilla, oak and sometimes subtle hints of the original spirit. The intense and complex characteristics of bourbon meld with

the beer, creating a delightful harmony of flavors.

Bourbon barrel-aged stouts are particularly famous, with the rich, toasty flavors of the beer complementing the sweet, vanilla notes from the barrel.

WINE BARREL-AGED BEERS

Wine barrels are another choice that brewers use for aging beers. These barrels can contribute unique flavors depending on the wine's varietal and the characteristics of the wood. Wine barrel-aged beers can showcase fruity, tart or vinous notes, with undertones of oak and the wine's

residual sweetness or acidity.

Sours, saisons and Belgian-style ales are a popular choice for aging in wine barrels to develop their distinct profiles.

OTHER BARREL VARIETIES

Craft brewers are known to experiment with a wide range of barrels to impart unique flavors into their beers. Whiskey barrels, for example, provide similar characteristics to bourbon barrels, but with subtle variations based on the whiskey's composition and origin.

Rum barrels infuse beers with tropical and spicy notes, while tequila barrels offer a

distinctive agave character.

THE AGING PROCESS

Barrel aging is not a quick process. Beers are typically aged for months or even years to allow for proper maturation and flavor development.

Barrel-aged beers are often seen as a luxury or special occasion treat due to the time and effort required for their production — and their subsequent higher price. When enjoying a barrel-aged beer, take the time to savor its complex flavors and aromas. Notice how the beer evolves as it warms in the glass, revealing new layers of character with each sip.



Beer and Cocktails: Flavor Fusion

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The craft beer revolution has extended beyond the realm of beer, making significant inroads into the world of cocktails.

Bartenders and mixologists are incorporating craft beer into their cocktail creations, resulting in a delightful fusion of beer and spirits. As the two worlds collaborate, they create new flavor combinations that are altering the world of cocktails and craft beer alike.

Horizon Beverage reports that while the beer cocktail scene is burgeoning in popularity, it technically isn't a new thing. There is evidence of beer cocktails that date back to 750 BC found in King Midas' tomb. However, they were also very popular in America starting around the time of the American Revolution with pubs serving up such

drinks as rattle-skull, a mix of dark beer, rum, lime juice and nutmeg. Another popular cocktail among sailors was a flip, which was made from beer, sugar, rum and eggs and served hot.

CRAFT BEER AS AN INGREDIENT OR MIXER

Craft beer offers a range of unique and complex flavors, making it an appealing ingredient in cocktail recipes. From hoppy IPAs to rich stouts and tart sours, each beer style brings its distinct characteristics to the cocktail glass.

Craft breweries are producing beers with creative flavor profiles, often infused with fruits, spices or aged in barrels, providing an array of options for mixologists to work with.

Craft beer adds depth, carbonation and complexity to cocktails when used as a mixer. Bartenders sometimes incorporate beer as a replacement for soda or tonic water, elevating the flavor

profile of classic cocktails.

For example, a beer-based shandy combines beer with lemonade or citrus juice for a refreshing and effervescent twist on a traditional cocktail. Beers with citrusy or fruity notes can complement the flavors of spirits like gin or vodka.

BEER-BASED COCKTAILS

Craft beer is not limited to being a supporting player in cocktails. It can take center stage as the primary ingredient. Bartenders are creating unique beer-based cocktails that showcase the flavors and characteristics of craft brews.

For instance, a beer margarita combines a crisp lager or wheat beer with tequila, citrus juice and a touch of sweetness for a refreshing libation. Additionally, mixologists can use craft beer to create beer-based syrups, infusions or reductions.

Craft beer can be paired with spirits.

Similar to wine or whiskey pairings, certain craft beer styles can complement and enhance the flavors of specific spirits. For example, a hop-forward IPA can provide a robust and bitter counterpoint to the sweetness of bourbon, while a smooth and malty amber ale can harmonize with the rich flavors of a dark rum. These beer and spirit pairings can balance both flavors allowing the beer and spirit to shine.

COLLABORATIONS

Collaborations between craft breweries and distilleries have led to the creation of unique spirits aged in beer barrels, such as whiskey aged in stout barrels or gin aged in hoppy IPA barrels.

The integration of craft beer into cocktail culture has contributed to a broader and more diverse range of options for cocktail enthusiasts. It has expanded the flavor horizons and allowed for the exploration of new taste experiences.

Explore Fruit-Infused Beer

Craft beer enthusiasts search out unique and adventurous flavors, which has contributed to the popularity of fruit-infused beers.

Fruit-infused beers combine the refreshing qualities of beer with the vibrant and natural flavors of fruits. There is a diverse range of flavors, making them popular among those who like variety.

Fruit-infused beers, also known as fruit beers, involve adding real fruits, fruit extracts or fruit juices during the brewing process. It introduces new layers of aroma, flavor and sometimes color. Brewers have experimented with many types of fruits, from classics like berries and citrus to tropic and stone fruits.

Reportlinker.com reported on the fruit beer market in spring 2023, predicting robust growth for fruit beers because it had low alcohol content and more brewers were offering comprehensive options. They reported that over the past five years, one in 10 global beer launches have included fruit beers.

The app-based craft beer retailer, Tavor, reported that nearly 20% of all the products they offered in 2021 were heavily fruited, up from only 10% the previous year.

HISTORY OF FRUIT BEERS

Lowercase Brewing



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Company points out that fruit beers aren't a new thing. The modern tradition of fruit beers began in the 1930s with the Belgians brewing cherry beers followed by raspberries and peaches in the 1950s and 1980s.

American craft breweries have run with the trend, creating many new combinations including raspberry wheat

ales, cherry or pumpkin stouts, and various kinds of fruity sours.

ADVANTAGES OF FRUIT-INFUSED BEERS

One of the primary advantages of fruit beers is the burst of flavor they provide. Each fruit brings unique characteristics to the beer, resulting in a blend of sweet, tart or tangy

notes. For example, adding raspberries to a wheat beer can create a luscious, fruity profile with a hint of tartness, while infusing oranges into a pale ale can impart a bright and citrusy zest. These fruit additions enhance the flavor and can balance the bitterness of hops or add complexity to the malt backbone of the beer.

Reportlinker.com found that

fruit beers are considered less of a health risk than traditional beers. According to the World Health Organization, alcoholism causes three million deaths per year and contributes to 5.1% of the world's disease and injury burden. Fruit beers are less harmful to the liver or kidneys and contain soluble dietary fiber, folic acid, vitamin E and other minerals.

FRUIT-INFUSED BEER STYLES

The versatility of fruit-infused beers allows for a wide range of styles. For those searching for lighter options, fruit-infused wheat beers or Belgian-style ales are popular. They showcase fruit flavors, with the fruity esters and phenols from the yeast playing alongside the fruit additions.

For those craving something bolder and more intense, they can imbibe fruit-infused stouts or sour beers. They can savor a decadent chocolate stout infused with ripe cherries or indulge in a tropical sour beer bursting with the flavors of passion fruit and guava. These are rich and complex beers that push the boundaries of traditional flavor profiles.

Brewers have experimented with spices, herbs and barrel aging to elevate the complexity of these beers. Adding spices such as cinnamon, vanilla or coriander can add depth and intrigue to fruit-infused beers. Barrel-aged fruit beers, aged in wine or spirits barrels, can acquire additional layers of complexity and subtle oak notes.

An African Brewery Revolution

Over the past decade, the craft beer movement has gained momentum across Africa.

While still relatively young compared to more established craft beer scenes in other parts of the world, Africa's craft beer industry is making significant strides and garnering attention for its innovation and quality.

The Canadean Ltd. research firm said craft beer is expected to grow by 29%, compared to mass-produced beer's growth rate of 5%.

SOUTH AFRICA

South Africa is at the forefront of Africa's craft beer revolution. It boasts a thriving craft beer culture with numerous breweries and beer festivals. Cape Town, in particular, has become a hub for craft beer, offering a wide range of breweries, taprooms and beer-centric events.

Beer is the most popular alcoholic drink in South Africa and the country is the twelfth largest beer-consuming nation in the world. In 2020, the Craft Brewers Association of South Africa reported that there were around 220 craft breweries in the country. Craft brewing has gone from accounting for only 1% of total beer sales in 2015 to 5% in 2020.

Craft beer has been active in South Africa for nearly 30 years. A source of its recent



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growth has been the entry of Black entrepreneurs into the market, brewers who are able to capture the imagination and taste of Black men and women, according to Food Business Africa.

GROWTH IN OTHER COUNTRIES

Kenya has seen the rise of several breweries such as Bateleur Brewer, the Big Five Breweries and 254 Brewing. After South Africa, Kenya is

considered one of the most mature craft beer industries, with the pioneering Big Five Breweries launching in 2009.

Nigeria is home to breweries like Bature Brewery and Gruvi's Grains, which is helping it to emerge as a craft beer destination. Ghana has experienced the emergence of craft beer with names like Accra City Aleworks and Hop House. The Inland Microbrewery has been creating beers for 20 years while Tema

Microbrewery boasts that it is Ghana's first craft beer that follows Reinheitsgebot, a Germany purity law of beer-making.

Countries like Namibia, Uganda, Rwanda, Tanzania and Ethiopia are also witnessing the rise of local breweries and beer scenes.

AFRICAN CRAFT BEER SCENE

The craft beer industry in Africa often draws inspiration

from traditional brewing techniques and local ingredients, incorporating them into unique and flavorful beer offerings. Brewers often experiment with traditional African ingredients such as sorghum, millet and indigenous fruits, resulting in beers that showcase the continent's rich cultural heritage.

From hop-forward IPAs to refreshing wheat beers and unique brews infused with African spices or fruits, African craft breweries are pushing boundaries and offering a wide variety of options.

This move away from U.S.- and European-influenced styles have contributed to a more mature industry. Mohope Brewery, for example, creates its premium craft beer by drawing upon Basotho culture and heritage. Brewsters Craft is South Africa's first Black woman majority-owned craft brewery, and it incorporates sorghum into its beers and has created a zero-alcohol beer with hibiscus. The Kenyan Big Five Breweries uses aroma hops and a local stimulant, miraa or khat, to create Crazy Donkey IPA, a beer with a spicy and grassy aroma.

West African brewers have been using fonio and introducing the ancient grain to others worldwide as a more sustainable option. An article in the Guardian quoted brewmasters who believed that the use of fonio in craft beers could help alleviate issues of poverty, food shortages, the climate crisis and drought.

Craft Beers through the Seasons

One of the allures of craft beer is the concept of seasonality.

As a beverage that celebrates creativity and diversity, craft beer can complement the unique characteristics of each time of year and craft breweries are creating drinks with distinct flavors, colors and moods.

Craft beer and seasonality go hand in hand, with breweries leveraging the distinct characteristics of each season to create unique and memorable brews. Many breweries also offer seasonal beer releases, raising interest among craft beer enthusiasts to explore new flavors and limited-edition offerings.

While certain beer styles are associated with particular seasons, personal preference and regional variations play a role in beer choices as well. In warmer climates, styles like wheat beers and IPAs might be enjoyed year-round, while in colder regions, winter ales and stouts may dominate during winter, but are still enjoyed at other times.

SPRING

Craft breweries embrace the freshness of spring by offering beers that capture the sense of renewal and vitality. Look for light and crisp beers like Belgian-style saisons, known for their fruity and spicy notes. These beers are refreshing and often have a slight tartness, making them perfect for enjoying as the weather begins to



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warm up. Additionally, hoppy and floral pale ales can evoke the blooming of flowers and bring a burst of hop-forward flavors to your palate.

SUMMER

As the season of sunshine, beaches and outdoor gather-

ings dawns, craft breweries offer an array of beers that provide thirst-quenching relief during the heat of summer. Look for refreshing wheat beers, known for their light body and subtle fruitiness. These beers are often accompanied by citrus or coriander

notes and are perfect for sipping by the pool or at a backyard barbecue. Crisp and hoppy India Pale Ales (IPAs) also shine in the summer, with their bold flavors and refreshing bitterness. Tropical fruit-infused IPAs can transport you to a tropical paradise,

tantalizing your taste buds with notes of mango, pineapple or passion fruit.

AUTUMN

As the fall leaves change color and the air becomes crisp, craft breweries embrace the flavors and aromas of autumn. Look for beers that incorporate ingredients like pumpkin, cinnamon or nutmeg, offering a warm and comforting experience reminiscent of seasonal desserts. Pumpkin ales, in particular, are popular during this time, capturing the essence of pumpkin pie with their spiced profiles. Additionally, malty and caramel-forward beers such as amber ales or Oktoberfest-style lagers provide a rich and toasty character that complements the cozy atmosphere of fall. Some breweries also offer hard ciders this time of year.

WINTER

Winter brings a chill to the air, and craft breweries respond with beers that provide warmth and indulgence. Seek out robust and full-bodied stouts or porters, with their rich flavors of roasted malt, chocolate and coffee. These beers are perfect for sipping by the fireplace, offering a comforting and decadent experience. Winter warmer ales, often brewed with spices like cinnamon or ginger, provide an added layer of complexity and a touch of festive cheer. These bold and flavorful beers are a delightful treat during the holiday season.