



BITE
SIZED
GUIDES

KENT'S HOPS & BEER

LOVINGLY CRAFTED KENTISH BREWS

kentfoodtrails.co.uk



Produced in Kent

We want to inspire you with the amazing food and drink of Kent. From products grown here for hundreds of years to 21st century innovations, food and drink has shaped the landscape of our wonderful county and we hope you enjoy exploring all it has to offer.

This series of publications will introduce you to a whole range of fabulous food and drink and kentfoodtrails.co.uk will guide you through what to do and where to eat and stay so you can make the most of the Garden of England. Enjoy!

Go to producedinkent.co.uk to find out more about the tasty work we do inspiring everyone to buy locally.



As Dickens' Mr. Pickwick noted, Kent and hops are indivisible. Almost all varieties now grown in Britain were developed in Kent, either selected by growers such as Mr. Fuggle (1875) or Mr. Golding (1790), or by breeding at the world renowned Wye College and its successor Wye Hops Ltd., ensuring Kent remains the home of hop breeding.

Dr. Peter Darby,
Research Director for Wye Hops Ltd

WHAT'LL IT BE?

...a foaming deep bronze bitter bursting with grassy hops? Or perhaps a juicy thirst-quenching golden ale with just a hint of hoppy bitterness? Either way you're in the right place! Welcome to Kent, the home of the hop, guardian of a venerable brewing tradition and a place right at the forefront of a beery renaissance!

Think that's a bold claim? Well, we had the first hop gardens on these islands and historically we were the biggest producer of hops (we needed most of London to come down and help pick them!) and all because we have just the right combination of soils, climate and location. But hops are only half the story, we're brewing masters too! You'll find a great number of breweries across the county, each populated with passionate, knowledgeable and innovative characters who truly care about their beer.

The best part? You'll find more pubs than you can shake a stick at (traditional and micro), more beers than you ever imagined and more interesting tastes than you were expecting. The craft of making beer is changing perceptions. Beer is hip, Kent rocks and there are flavours and stories out there in abundance.

Drink up, there's plenty to discover!



THINGS YOU NEVER KNEW ABOUT BEER

1. A top tipples...

Beer is the third most popular drink in the world, sadly edged out by water and tea!

2. Old as the hills...

Beer is one of the world's oldest beverages! Egyptian grave goods included malted barley whilst brewing in ancient Babylon was such a serious business that producing a bad batch was sufficient grounds for being drowned in it!

3. Beer saved lives!

In medieval times, ale was the cheapest and cleanest beverage available (water was downright dangerous) and people were drinking up to a gallon a day!

4. Not just for grown-ups...

Watered down "small beer" was once a regular thirst quencher for children! Malt extracts are still given to children today.

5. A serious brewing tradition

Not only is Kent integral to the story of hops in Britain, it's also home to Shepherd Neame, the country's oldest brewer with a history that can be traced back to 1573.

6. Divine providence

There are at least five patron saints of beer and brewing, chief being France's St Arnou, as well as Sant Arnaldo di Soisson, the patron saint of hop pickers, and Saints Adriano, Floriano and Brigida.

7. Gravity defying

It's true - beer bubbles do not adhere to the laws of physics! Following a non-Newtonian loop, they rise in the centre where frictional drag is less and down the outside as the top gets crowded.

8. Foamy goodness

The foamy head is an important part of the beer. Formed by a complex carbon-dioxide reaction, interestingly you can dissolve it with a quick stir of your finger. Or just drink it!

9. Hops on the run

It was Flemish refugees fleeing religious persecution who brought hops to Kent and made them part of our society. Until that time, ale was 'bittered' with gruit - a mix of herbs containing heather, botanicals, spices or bark.

10. Cenosillicaphobia...

the fear of an empty beer glass!

ROLL OUT THE BARREL

The history of Kentish Beer

Unlike the bright exciting beer we know today, Kent's brewing history is rather murky. We do know that beer predates the Romans (possibly by 3,000 years) and was made by just about everyone; from 'brewsters' to taverns and monasteries.

Things got interesting however with the arrival of hops in Kent from the Low Countries in the 1500s. Hops were a flavour sensation, livening up the traditional "ale" and also acting as an effective preservative. But not everyone was so keen and a moral panic ensued fearing the "wicked & pernicious weed" would corrupt society. Fortunately for beer drinkers everywhere, common sense prevailed and the first hop garden was planted in Westbere, near Canterbury, around 1524.

By the 18th century, virtually all beers contained hops, and hundreds of workers were needed to harvest Kent's 70,000 acres. Every year travelling gypsies and whole families from the East End of London would make their way down to Kent to pick the hops.

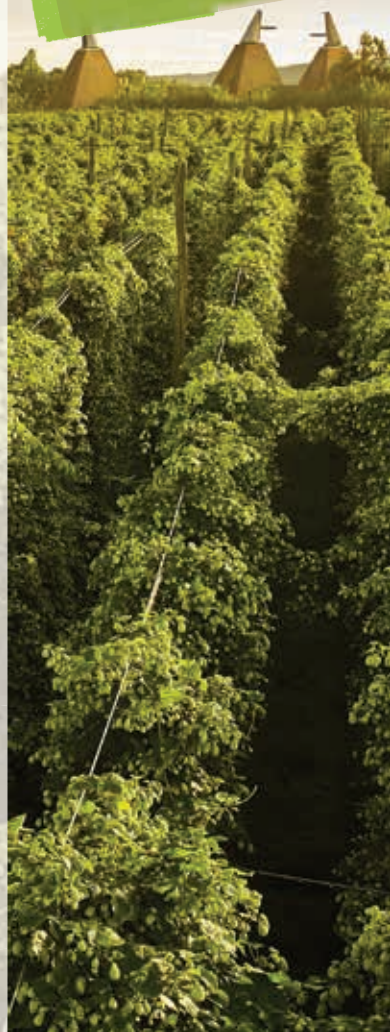
However by the turn of the century the bubble burst. Beer consumption began to fall and alcohol restrictions during WW1 proved a knockout blow dropping consumption to a mere 13 million barrels in 1919. Kent's hop gardens fell markedly out of favour with only 11,000 acres remaining by 1932.

But here's the happy ending – the last 10 years have seen a spectacular renaissance for beer! There are over forty breweries in Kent, micropubs are flourishing and the variety and quality of the brewers' art on show across the county is simply staggering. More importantly, people care about beer and as a result, Kent's hop gardens and brewing tradition now have a bright future.

The history of brewing and hop growing in Kent is well documented so if you'd like to know more, britishhops.org.uk is a good place to start...

Many varieties of hop bear the name of a Kent farmer or a Kent village. Furthermore, the pedigree of most hops bred throughout the world can be traced back to varieties developed in Kent.

Dr. Peter Darby, Research Director for Wye Hops Ltd



The seam of chalk running through Kent provides a piquancy to the water from its high calcium content. Together with the delicate aromas and bitterness from the hop, a truly satiating and bitter 'Kentish' Ale was born. This tradition carries on today.

Julian Herrington, Masterbrewer and Brewing Technologist

THE RIGHT STUFF

Key ingredients for that perfect pint

Ever wondered what's in your beer? Well wonder no longer, as here's the lowdown on the beery building blocks:

Malt

Science 101: to make alcohol you need sugar and, in the case of beer, the sugar source is grain. Beer is usually based on barley but wheat, rye, oats, maize and even rice can be used instead or as part of the 'recipe'.

Naturally the starch (the sugars) in barley is not suitable for fermentation, it needs "malting" which involves soaking the barley, applying heat to start germination and then more heat to halt it. All those starchy carbohydrates get broken into simple sugars, the perfect meal for the yeast. The malt is then roasted, lightly for lighter beers such as pale ale or a heavier full roast for dark beers – porters and stouts – giving a distinct coffee or chocolate flavour.

However, here's where the brewer gets creative. By combining different malts you can produce a myriad of flavours, colours and characters. Start with a pale malt such as Maris Otter (usually 90% of any ale) then go crazy! A slightly roasted Crystal Malt adds flavour as well as a darkness to the beer, small quantities of Chocolate Malt (malting and roasted) and Roast Barley gives a toffee flavour whereas Red Rye Crystal (malting then crystallised) will add some spiciness.

Water

Beer is about 90% water! It might not be as exciting as malt but it matters! Kent's pure, clean groundwater has been filtered through the chalk and underlying greensand which is why so many Kent breweries were sited on or near a spring or river.



Yeast

The miracle worker in the mix, yeast is a natural fungus that has been around since before the dinosaurs. It's found in the environment all around us and undertakes the important task of eating simple sugars from the malt and producing alcohol and carbon dioxide. After a week or two of gorging and reproducing, the environment then becomes toxic for the yeast and it goes dormant.

Different yeast strains can have a dramatic impact on the beer, resulting in flavours like apple, banana, anise or cloves whilst some lend very little flavour, simply allowing the malt, water and hops to shine through instead.

A unique brewer's yeast

Many brewers carefully cultivate their own strains of yeast, such as the Canterbury Brewers & Distillers, who, in partnership with Canterbury Christ Church University, have captured and cultivated a yeast from a cherry near the old brewery wall in St. Augustine's Abbey, infusing over 1000 years of history into their beer and whiskey brew!

So there's your basics.

**Now flip the page to discover
the star of the show...Kentish hops!**

'KENTISH ALE'

Shepherd Neame's Kentish Ale holds the 'Protected Geographical Indication' (PGI) mark which guarantees a product is only produced in its place of origin and has qualities reflecting that place. Made in the traditional method using water from an artesian well below the brewery, Kentish Ale and its fellow Kentish Strong Ale are two of only three UK beers to currently hold the mark.





Since their introduction into England, hops have become an important part of Kent's agriculture largely due to our 'terroir'. Deep brick earth over free-draining chalk in the east suits the Goldings whilst heavier Wealden clay in mid-Kent suits the Fuggles. Hops also enjoy slightly lower rainfall afforded by the shelter of the Downs.

Dr. Peter Darby, Research
Director for Wye Hops Ltd

THE HOME OF THE HOP

Growing hops in Kent

Integral to top-notch beer, hops are the flowers of the climbing plant *Humulus Lupulus*, or 'Wolf of the Woods'. Their chemical structure is complex (found nowhere else in the plant kingdom) with the flowers full of oils and resins which confer bitterness and preservative properties as well as aroma to the beer. Many breweries produce single hop beers as well as beers containing a mix of hops.

Kent 'terroir'

Kent's varying terroir makes it hop heaven; our different soils each place a different stress on the hops, resulting in unique aromas and flavours which are also influenced by the amount of rain, sunshine, temperature and the salt laden winds from the North Sea.

Of the farmers now growing hops commercially in the UK, half are in Kent! And our new generation of growers are securing their future by expanding their hop farms, restoring heritage hops and planting new varieties.

Twiddling

In spring, the hops are trained or "twiddled" up a matrix of wooden poles, wires and string up to 5 metres (16 feet) in length and can be harvested for many years. The plants reach the top of the strings in late June (the old adage is that they reach the top on the longest day), then start to produce the cone-like flowers beloved of brewers.

Despite their rampant growth and weed-like reputation, hops are not invincible and wilt, downy mildew and a host of other diseases and pests can take their toll. After Verticillium Wilt once totally destroyed the Weald's hop farms, wilt tolerant hops are now in high demand.

Harvest

Until the 1950s, most work in the hop gardens was done by hand with whole families coming down from London every year for the harvest. Conditions for the hop pickers were basic, to say the least! Housed in unheated wooden huts with corrugated iron roofs and no running water, they would sleep on straw-stuffed mattresses, cook over fires outdoors and wash their clothes in a local stream.

Ironically this harsh existence was far preferable to being packed into the slums of the East End: the "annual hop" was an opportunity to breathe clean air and nostalgia for those days still draws people to Kent.

Nowadays hops are harvested mechanically, but if you fancy getting a feel for the action you can stay in a converted old hop pickers hut – but now with all mod-cons!

Drying

Being 80% moisture, fresh hops don't keep long after harvest, making drying essential. Oast houses - such iconic features of the Kent landscape - are essentially tumble driers using heat and convection to dry out the hops. The traditional oast consists of a round room topped by a 'witch's hat' with a cowl on the summit that swings in the wind, helping to control the flow of air from the kiln beneath. Traditionally hops needed about 8 hours to dry before being compressed for transport.

Nowadays hops are dried in large bins which pass over a line of kilns with electric fans to direct the heat. Most of the traditional oast houses have been converted for residential use but you can still see examples at the Kent Life Museum, the Hop Farm, and Brook Agricultural Museum. It's also possible to stay in a converted oast house, some of which are let as self-catering cottages.

NOT JUST FOR DRINKING & DECORATION

Due to their sedative effect, a pillow filled with hops is a popular folk remedy for sleeplessness. They've also been used to treat everything from anxiety to migraines, bed-wetting, kidney stones and leprosy(!). Research is currently being undertaken on hops to find new medicines.



EAST KENT GOLDINGS

Providing a flavour likened to rich marmalade, this hop variety, first selected in the 1790s and grown within a defined area in East Kent, holds a Protected Designation of Origin (PDO) mark, meaning a product must have distinct characteristics of the one area in which it is produced, processed and prepared.

So now we have the ingredients,
here's how the recipe stacks up
to provide that

PERFECT PINT:

ALL GRIST TO THE MILL

The brewers art

THE BREWING PROCESS

CRUSHING THE MALT



1



MALT IS GROUND IN THE MILL - OR THE HOPPER - CREATING THE GRIST (THE GRAIN PART OF THE RECIPE).

MAKING THE WORT

2



THE GRIST GOES TO THE MASH TUN WHERE IT'S MIXED WITH HOT WATER, RELEASING THE SUGARS, RESULTING IN A SUPER SWEET TYPE OF PORRIDGE CALLED WORT.

WORT OR BREWER'S BREAKFAST
- SUPPOSEDLY A GREAT
HANGOVER CURE!

BOILING THE KETTLE



3



THE WORT IS RUN TO THE COPPER BREW KETTLE, WHERE IT IS BOILED TO STERILISE IT FOR ABOUT AN HOUR, AND THE HOPS ADDED.

THE HOPS PUT IN AT THE START IMPART THE BITTERNESS. A SECOND BATCH OF HOPS ADDED IN THE LAST 10 MINUTES GIVES AROMA (FLAVOUR).

FERMENTATION

4



20-21°
PERFECT
FERMENTING TEMP



THE WORT IS COOLED AND PUMPED INTO THE CONE SHAPED FERMENTATION TANKS WHERE YEAST IS ADDED. THE PERFECT FERMENTING TEMPERATURE IS 20 OR 21 DEGREES AND TAKES 3-4 DAYS.

THE TEMPERATURE IS LOWERED TO 8 DEGREES. THE YEAST SINKS TO THE BOTTOM AND IS DRAWN OFF.

CONDITIONING

5



FOR REAL ALE, THE BEER IS THEN PUMPED INTO METAL CASKS WHERE THE SECONDARY FERMENTATION TAKES PLACE. FININGS MIGHT BE ADDED TO MAKE IT CLEAR - BUT NOT FOR A CLOUDY CRAFT BEER!

BOTTLED BEERS ARE BOTTLED STRAIGHT FROM THE TANKS (THE SILICON IN THE GLASS DOES THE FINING JOB). SECONDARY FERMENTATION TAKES PLACE IN THE BOTTLES, OR IT'S ARTIFICIALLY CARBONATED. LAGER IS TRANSFERRED INTO KEGS WHERE IT'S ARTIFICIALLY CARBONATED.



Sounds simple huh?

But remember brewers are an innovative bunch and the market for craft beers encourages them to experiment and push the envelope. Many buy only local hops, experiment with single and mixed hop beers and tinker with flavours, adding fruits to their beers through collaboration with local fruit growers. Ultimately it's all about freshness and flavour!

KENT GREEN HOP BEER

A definitively Kentish tippie

One of the perks of growing half of all Britain's hops is that you get first dibs come harvest, and if there's one quintessential date for every Kentish beer aficionado's diary, it's Green Hop season!

Come the end of summer, the brewers of Kent celebrate the harvest by brewing with freshly picked green hops, straight from the bine. These fresh hops give completely unique flavours and aromas so that the resulting beers have a distinctly different character to beers made with dried hops.

As fresh hops start to decompose quickly, the brewers get their hops as locally as possible, freshly harvested and brew straight away, usually producing a green hop beer by the middle to end of September. Kent's brewers are never far away from their nearest hop gardens so many have developed close working relationships with local growers and will visit during the flowering season to select their own bines.

It's all about capturing the Kent hop harvest in the beer!

Kent Green Hop Beer must be:

- Brewed in Kent
- Flavoured only with fresh, undried hops used within 12 hours of picking
- Using Kent-grown hops only!

The official launch of Kent Green Hop Beer Fortnight takes place at the Canterbury Food & Drink Festival and the beers are available across the county for just two weeks at selected pubs and events such as the Spa Valley and Dartford festivals.

Check out the brewers and the full programme at kentgreenhopbeer.com.



Artist: Peter Gander



BEER GOGGLES

A primer for the discerning drinker

Do you know your porter from your IPA? Or your brown ale from your stout? Check out our handy guide and you'll be propping up the bar like a pro in no time!

Bitter

A pale ale style of beer, usually deep bronze to copper in colour with a spicy, peppery and grassy hop character, a powerful bitterness, tangy fruit, juicy and nutty malt.

Factoid: A catchall term for a family of ales including Ordinary Bitters, Strong Bitters and Best Bitters. Malt and fruit characters tend to dominate but hop aromas are achieved often by adding hops to the casks as they leave for the pubs.

Try with: Strong Kentish hard cheese mingles superbly with bitter Kent Ales whilst a longer matured cheese can take on more alcohol to release a complexity of flavours.

Porter

A complex flavoured dark beer with a character of raisin and sultana fruit, espresso or cappuccino coffee, liquorice and molasses, all underscored by a hefty hop bitterness.

Factoid: A style of beer popular in the 1700s, it acquired the name Porter due to its popularity among London's street-market workers.

Try with: Rich stews, duck and dairy dishes. Chocolate desserts and Christmas Pudding are beautifully complemented by porter and stout!

Stout

A stronger, more intense version of porter enhanced with roasted malted barley. Stouts can be dry or sweet, often with coffee and chocolate notes and a hint of berries.

Factoid: Arthur Guinness made the iconic drink by blending in some un-malted roasted barley to produce a style known as Dry Irish Stout (and subsequently achieved world domination).

Try with: Traditionally a companion to oysters, also great with grilled meats and sausages. We say try a salted caramel brownie with a luscious stout!



Due to the rich malty flavours and natural ageing over the yeast in the cask, beer makes for an excellent companion to food. (Often better than wine!) The fizz in beer, just like champagne, helps lift the fruity notes of both the ale and the dish whilst Kent's aromatic real ales match foods perfectly with their bitter edge cutting the richness.

Julian Herrington, Masterbrewer and Brewing Technologist



Pale Ale and IPA

Using pale malts, usually golden or pale bronze in colour, look for juicy malt, citrus fruit and a big spicy, peppery bitter hop character.

Factoid: First brewed in the 1800s for the colonial market, IPAs were strong in alcohol and high in hops which helped keep the beers in good condition during long sea journeys.

Try with: Pale ale's diversity means there are few foods it can't partner, from fish & chips to Romney Marsh lamb.

Golden Ale

A new style of pale amber, gold, yellow or straw coloured beer with a biscuity and juicy malt character derived from pale malts, underscoring by tart citrus fruit and peppery hops. Best served cool.

Factoid: This well-hopped and thirst quenching beer developed in the 1980s as independent brewers attempted to woo younger drinkers from heavily-promoted lager brands.

Try with: Great with summer dishes - think salads and pasta - and pub classics such as pâtés and ploughman's.

Brown Ale

Nutty, caramel, roasted with some sweetness, with an amber to dark brown colour that can be cloudy in some ales. Expect more malt than hops, with fruity or nutty aromas.

Factoid: More often served in bottles, brown ales have been around for centuries, but the sweeter style - more common in the south - became popular in London at the start of the 20th century.

Try with: A hearty beef dish such as a stew with mushrooms, or a charcuterie and Kentish cheese platter!

ALE V LAGER... FIGHT, FIGHT, FIGHT!

Both are beers! The difference is they're brewed with different types of yeast. Ale yeast ferments at the top of the brewing vat at room temperature whilst lager yeast ferments at the bottom, at a lower temperature.

Lagers tend to be light and crisp with a mellow, smooth flavour. With a higher carbonation than ales, they're often less bitter and are better served chilled.

Ales tend to be fruitier, more aromatic and with a stronger bitter note. Usually best served at room temperature.





GET THE BEERS IN!

Enough talk, let's get sipping!

If, like us, you're gasping for a pint at this point, then never fear! There are plenty of opportunities for sampling, buying and sipping your way through the wide variety of Kentish beers and ales, accompanied by great food and with great places to stay overnight. They're served at our pubs and restaurants, tap rooms at the breweries and the greatest proliferation of micro-pubs you'll find in the country!

Kent's beers and ales are also available to buy in bottles, cans, kegs and casks from farm and village shops, independent retailers and farmers markets across the county. Find out more at kentfoodtrails.co.uk.

Discovering Kent's beers by train

A tittle by public transport? Don't mind if I do!

The Kent Rail Ale Trail is a guide to Kent's micropubs that are accessible by train and features 37 watering holes on a circular route from London. All are within easy walking distance of the stations and hotels and B&Bs are readily available along the route.

The Real Ale Train (Kent & Sussex Railway) operates on selected dates between Tenterden and Bodiam, featuring real ales sourced from micro-breweries in Kent and East Sussex.

RESPONSIBLE DRINKING... AND (NOT) DRIVING

Do partake responsibly and plan your trip accordingly. Have a designated driver or why not take the train? We recommend overnighing locally too. Go to kentfoodtrails.co.uk for local accommodation.



THE MICROPUB REVOLUTION

... all started in Kent! The county boasts a greater density of micropubs than anywhere in the UK, each offering a simple service of good beers (and often ciders and wines) in convivial surroundings which are all about atmosphere, shared tables, community and socialising.

Walking

Wherever there's a good walk, there's usually a good pub to be found along the way! And any Kent pub worth its malt (sorry!) will be able to recommend good local routes.

The North Downs Way National Trail 'Ales of the Trail' connects local breweries and walkers, with official trail ales available in many of the pubs and inns along the route. Check nationaltrail.co.uk/north-downs-way.

The Faversham Food Trails take in the area of countryside known as the North Kent Fruit Belt, featuring lots of hop gardens and pubs! See visittfaversham.org/walks for details.

Long distance walking routes, including the Saxon Shore Way, Greensand Way, Eden Valley Walk, Darent Valley Path, Stour Valley Walk and Elham Valley Way, offer an unrivalled diversity of landscapes (including hop gardens) and plenty of opportunities to stop off at historic inns, pubs and tap rooms. Check explorekent.org.uk.

On your bike

Plenty of pubs and inns are to be found on long distance cycling routes such as Route 1, The Garden of England and local Regional Routes. See sustrans.org.uk for route details. Many provide facilities for cyclists - look out for the Cyclists Welcome accreditation.

Events and festivals

The county plays host to a wide range of beer (and cider) festivals throughout the year, but be sure to keep an eye out for the many pubs and micropubs hosting their own beer festivals and breweries giving talks on special brews and brewing.

CAMRA in Kent provides an extensive list of events taking place around the county - see their event calendar at kentcamra.org.uk.

The Faversham Hop Festival, running since 1990, is the largest free street festival in the south east and celebrates the town's hop heritage over two days of festivities. See favershamhopfestival.org

Produced in Kent

This is one of a series of food trails promoting Kent's local produce and distinctive landscapes. Whilst every effort has been made to ensure that the content of this leaflet is accurate and up-to-date at the time of printing, no liability can be accepted for any errors, omissions or misrepresentation of fact contained herein.

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Canterbury Brewers & Distillers, Clive Sawyer, Hukins Hops, Shepherd Neame.

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The European Agricultural Fund
for Rural Development:
Europe investing in rural areas.



**HE WAS A WISE MAN
WHO INVENTED BEER**

Plato



kentfoodtrails.co.uk