Irish/Scottish Styles

Scottish Light-14A-

Low to medium maltiness, toasty

Malt wins on this one. Hop for balance only.

Scottish pale malt and flaked corn typical, caramel malt for color.

Sugar additions are traditional.

Color Range: 17–22 SRM

Original Gravity: 1.030–1.035

Final Gravity: 1.010–1.013

IBU Range: 10–20

ABV Range: 2.5–3.2%

Serving Temp: 50°-55°

Aroma: Malts will be low to medium with notes of caramel & butterscotch; Low English hoppiness, fruitiness, and diacetyl; Peat smoke from the water is possible.

Flavor: Malty. Sweetness ranges from caramel to toastiness; Low diactyl; Low to moderate hoppy bitterness; Little to no hop flavors, if present should be English hops; Rich & grainy finish.

Appearance: Ranges from pale amber to dark copper; Head should be creamy and off-white; Clarity should be suburb.

Mouthfeel: Medium-Low to Medium

Carbonation: Low to Moderate

Food Pairings: Creamy spinach salads; Roasted lemon-pepper chicken; Steamed veggies; BBQ turkey; Meatloaf

The guidelines for the Scottish Light beer style are set by the Beer Judge Certification Program (BJCP) Style Committee. The below details are a summary of what a Scottish Light should represent.

Appearance:

Long cool fermentations create exceptional clarity in this beer. A low to medium creamy head of off-white to tannish white sits atop a liquid the color of drying amber or tarnished copper.

Aroma:

Low to moderate malty sweetness greets the nose with potential kettle caramelized highlights. Possible low hop aroma, fruitiness, and diacetyl. Possible, but not necessary, low to moderate peaty aroma, giving the beer an earthy, smoky quality. However, the “smokey” peat aroma should only be present from the source water.

Mouthfeel:

Low to medium carbonation pushes a med-low to medium body, which can appear somewhat creamy. The use of roasted barley will often give a dry quality.

Taste:

Malty, with sweetness usually carrying flashes of caramelization. A low diacetyl component is also sometimes present; giving slight impression of buttered caramel. A balancing low to moderate hop bitterness evens things up, but the scales are always (if only slightly) malt heavy. Hop flavor will be low to absent; if present it should represent the traditional English hop flavors. The use of unmalted roasted barley gives the finish a grainy drying character. Peat smoke in the flavor is not appropriate in the Scottish Light.

How to Brew a Scottish Light

Scottish ales are defined by maltiness and little else. The secret to brewing a successful Scottish Light is following: a simple malt bill, a light hand on the hops, kettle caramelization, pitch a large amount of healthy yeast, and a fermentation below 60°F.

The Grain Bill:

The base malt for a Scottish Light, and all Scottish ales for that matter, will be a pale ale malt or high quality pale or amber extract. If you want to go the simplest route there are ingredient kits available that make nice Scottish Light ales. But even if you're going all-grain, the recipe is a simple one.

Traditionally, it seems the base malt would have been one or two shades darker than most of today's pale malts, in the range of 3 to 4 SRM, unfortunately it is hard to find a base malt in this color range. Some companies still make a mild malt. It isn't easy to find, but might fit the bill if you want to be really authentic. Don't worry too much about it, though. A small percentage of roasted grains, added to a base of pale malt will do just fine.

A good English pale malt, or if you can get your hands on it a Scottish pale malt is best for the base. I know Simpsons malt sells a Scottish pale under their Golden Promise line. Your recipe can be comprised of up to 98% base malt. Add 2% roast barley and you have a Scottish Light / 60 Shilling recipe.

Now if you want to complicate things you could cut the base malt down to around 90% and build the other 10% out of Crystal, Chocolate, Black, Roast Barley, and wheat. How these are combined and which are used is a matter of experimentation. Each variation within that 10% window will build a slightly different Scottish Light / 60 Shilling, so explore! Just be sure to keep that black malt below 2%.

The Mash:

This is another beer for the simple single-step infusion mash. A resting temperature of around 156°F, give or take a couple degrees, will give you the gravity and richer body needed for this style.

Water:

The mineral makeup of the water is not extremely important for the Scottish Light style, in fact, unless you have terrible water I'd suggest using unaltered water the first time you brew. Taste it, and then make adjustments you believe are necessary from there.

There is no need to add gypsum, but a little salt can help accent the sweet (1¼ teaspoon calcium chloride or table salt). Again, I'd go with your straight water the first go around.

Hops:

Because hops grow poorly in Scotland and the closest (and cheapest) place to import them from was England, it is traditional to use English hops, but not absolutely necessary.

Hops are very much secondary in the Scottish Light beer style. Their impact on the overall flavor is so minimal that it really doesn't matter what variety of hops you use. And, come to think of it, because of these characteristics this is an excellent place to use up some of those older hops you may have around. Low bitterness and low flavor characteristics are a necessity for this style, so keep that in mind when selecting a type of hop to brew with.

The Boil:

If using the above simple grain bill (98% pale, 2% roast barley) you can create a small amount of caramel flavoring by kettle caramelization. This is the process in which you take a small amount (1/2 a gallon for a 5 gallon batch) of your wort and boil it in a separate kettle from the rest until it becomes a deeper, richer brown color. Then add it back into your main brew kettle. Often you can start both your small boil and main boil at the same time and by the time your main wort has begun to boil the caramelizing wort is ready to be added back in.

If you have added other specialty grains like crystal, chocolate, or black malt this step can still be done, but isn't necessary because we will get color and caramel flavors from the grains.

Yeast:

The yeast is important for this style, but not for the same reason it's important for say, a Belgian pale ale style, or even an English style. For those styles you'd select a yeast for the flavors it imparts. Here, we want a yeast that is very clean and neutral, with minimal flavor additions, and one that can ferment at a temperature below 60°F. The particular strain is not that important as long as it has a neutral profile. Pitching a lot of healthy yeast and fermenting at a cooler temperature also helps reduce yeast flavors.

Yeast strains that would work well for a Scottish Light include:

DRY — Safale US-05 or Danstar Nottingham

LIQUID — Wyeast 1728 Scottish Ale or White Labs WLP028 Edinburgh Scottish Ale

Create a yeast starter. You will be fermenting at a cooler than usual temperature, so you will need a greater quantity of healthy yeast. Doubling the amount, you'd cast for most other ale styles will work wonders.

Fermenting:

Scottish ales are fermented a bit differently. Most ale will ferment out in about a week if not less, but because Scottish ales are fermented much cooler it can take up to three weeks for the primary to finish. Then it is traditionally cold conditioned in a secondary for up to 6 weeks to aid in clarity and accent the malty profile.

Scottish Heavy-14B-

See above; more biscuity malt and caramelly character than 14A

Background hops for balance

Medium body

Sugar additions traditional

OG- 1.035-1.040

STYLE

There are essentially three "weights" of standard Scottish ales (the Wee Heavy or Strong Scotch Ale is so far beyond these that it shouldn't even be spoken of in the same breath): Light, Heavy, and Export (sometimes known as 60 shilling, 70 shilling, and 80 shilling, respectively, for the rate at which they were traditionally taxed). The Light is the lightest, of course, and is designed to "overperform" in flavor terms given its (sometimes almost-non-alcoholic) gravity level.

The Export starts to resemble the ESB or American Pale Ale in strength and intensity. The Heavy, though, lands in the middle of the range, and it can be hard to make one that stands out if your approach is just "make it a little stronger." All three bear similar hallmarks of Scottish ale flavors: caramel, biscuit, and minimal hops.

The question is this: how much flavor are you aiming for? At the judging table, we're looking for something with more apparent bulk and flavor than the Light, but we still want to be able to see some restraint. It can be a hard needle to thread, which makes this even more ironic: the Scottish Heavy might be the easiest of the three to make.

RECIPE

Parts of this recipe stay the same. Our base grist is still mostly Maris Otter (six pounds/2.7kg) and Munich (one pound/0.45kg), and the half-pound (0.23kg) of British 65L crystal stays the same. That base and crystal lay down some solid caramel, bready, and toasty flavors. However, I leave out the Victory and higher-lovibond crystal malts here - we don't need to "fake" body and flavor quite as much, given the extra gravity we get to play with. Instead, I sub in another half-pound each of chocolate rye for the pale chocolate (to add some spicy malt flavors along with the touch of drying roast) and some malted wheat for a smooth breadiness. The result is a rich-but-drinkable malt profile with an ABV of about 4.3 percent, which is actually a touch high for the guidelines, but isn't uncommon in the marketplace.

PROCESS

Mash and boil and chill as usual, and pitch your yeast into a nice, cool wort. 63F/17C is a great fermentation temperature here, and will produce a clean and malty near-session-strength ale in about 7-10 days. Don't worry about a diacetyl rest: a little diacetyl is a good thing here. One major departure for me is that I like to carbonate to about two volumes of CO2, which is higher than cask/pub versions of the style, but I think it brings out the aromas nicely and improves the mouthfeel, making it more substantial.

The higher carbonation level is a drag on the Light, which has more-delicate malt flavors, but the Heavy can handle it and, I think, benefits from it.

Scottish Export-14C-

More bready and caramelly than the smaller styles before it

Malt focused ale with character added from caramel type malts

Medium Body

Could add amber and/or brown malts

Sugar additions traditional

OG- 1.040-1.060

Wee Heavy-17C-

Similar to English Barleywine

Richly malty with significant caramel

Low hop flavor and bitterness, low to no hop aroma

Pale malt with roasted barley for color

Smokiness from the boil and process, not from smoked malts

Color Range: 14-25 SRM

Original Gravity: 1.070-1.130 OG

Final Gravity: 1.018-1.040 FG

IBU Range: 17-35

ABV Range: 6.5-10.0%

Appearance: Ranges from rosy copper to dark brown; Foam head will be thick with off-white to tan hue; Clarity should be excellent.

Aroma: Malty caramel backbone with hints of smoky aromas; Hoppy aromas will be low or absent, with a floral quality; Low diacetyl; Alcohol or dark fruit ester aromas may be moderate.

Flavor: Caramel leads the charge with hints of roasted malts, nuttiness or light smoke possible; Low to moderate hop flavors or bitterness; Diacetyl will be low or absent; Alcohol & esters will be low to medium, with dark fruitiness; Sweet & moderately dry finish.

Mouthfeel: Medium to full body; Medium-low to moderate carbonation; Smooth mouthfeel with slight alcohol warmth.

Serving & Storage Temperature:50-57°F

Shelf Life: 9+ Months

Suggested Glass: Thistle glass

Food Pairings: BBQ ribs, Game meats with sweet kick, Asiago or Gruyere cheese, Caramel Apples, Crème Brülèe & Other Sweet Desserts

The guidelines for the Wee Heavy are set by the Beer Judge Certification Program (BJCP) Style Committee. The below details are a summary of what a Wee Heavy (or Strong Scotch Ale) should represent.

Note: In 2015, the BJCP reformatted their style guidelines. This beer style was renamed from “Strong Scotch Ale” and is now known as Wee Heavy. It was also re-categorized from the “Scottish & Irish Ale” category (9E in 2009), and now resides within the “Strong British Ale” category (17C in 2015) in the official style guidelines.

Appearance:

A Wee Heavy can range in color from a light rosy copper to a dark brown, often shot through with ruddy highlights. Clarity should be good and a thick off-white to tan head should form, but may not last because of higher alcohol content. Stronger versions may have legs.

Aroma:

Big malt backbone awash with caramel. Possible hints of smoke from roasted malts, but peat-like smoke would be out of place. Hop aromas will be low if there at all, and should be of a light floral or deeper earth character. Diacetyl will be low to none. Both esters and alcohol can range into the moderate especially in stronger examples. Esters will usually be suggestive of dark fruit such as plum.

Mouthfeel:

Body can range from medium to full with some examples having a distinct chewy thickness. Medium-low to moderate carbonation. Alcoholic warmth helps balance the big malt presence and lends a smoothness to the mouthfeel.

Taste:

Malt centered with a deep caramel character, backed by tones of roasted malt, such as light smoke and/or nuttiness. Any peat smoke quality would be inappropriate. Diacetyl should be low to none. Both the hop flavors and bitterness should be low to moderate. Esters and alcohol should be in a low to medium range with the esters showing qualities of raisin, plum, or dried fruit. Finish can be sweet to moderately dry and hints of nut, caramel, smoke, and darker grain can carry into the aftertaste.

Food Pairings:

Scotch Ales should be saved for dessert or rich stick-to-you-ribs meals. The richer, fatter, more flavorful, with hints of sweet the food, the better this beer will pair. A rich leg of lamb with mint sauce or roast venison with a sweet reduction sauce would both work extremely well with the rich deep maltiness of the beer. Stick to game birds on the poultry front; Pheasant and goose have enough fat-gaminess to back this beers play.

Cheeses that work well with Scotch ale include Asiago, Gruyere, or mild smoked cheese.

A dessert in itself Scotch ales find their most artful pairings among the after dinner sweets. Try a crème brülèe, any sort of caramelized apple dish, or pull inspiration from the beer's homeland and bake up some Scottish shortbread.

Serving & Storage:

For best presentation and greatest appreciation, a Wee Heavy should be served at around 50-57°F in a traditional thistle glass. They are best stored at cellar temperatures away from light and can age for 9 months or more.

Irish Red-15A-

This is a beer style with limited history. Whether that limit is because some of it has been lost or because it is a relatively new style, not especially sought after in its own country, with a history half buried in that of English bitters, is hard to firmly nail down.

Glass of Irish Red Ale

There is a brief mention of "red ales" in a Irish poem dated back to the 8th or 9th century. This fleeting reference seems to be the earliest such allusion to red ale and says it was drunk in "Dorind" in Kerry, and "about the land of the Cruithni" (Cruithni is a name given the Pictish tribes). It is safe to suppose that what we consider Irish red in its modern styling is very different from the red ale spoken of in this poem.

For one thing, hops had just started to find their way into brewing and were a few hundred years away from monopolizing the job of "brewing herb." Other herbs such as heather, sweet gale, bog myrtle, and buck-bean still fed the bulk of the Irish brewers' art.

The Modern style seems to find its roots in English bitters and Pale Ales more than in any ode to the above lost and mysterious "red ale." Its beginnings are in the Irish town of Kilkenny in 1710 and the birth of the Smithwick Brewery and its Smithwick Draught ale. This new red ale was less hops focused and instead zeroed in on the malt.

It's interesting to note that this style is much bigger here in America then the country it's named for. This may seem odd at first, but there are two factors that I would contend, at the very least, greatly contribute.

In 1980 Coors Brewing bought the license to use the name Killian from George Killian Lett, a fifth generation brewer that had closed the doors of his once famous Brewery of Enniscorthy. Coors began to brew Killian's Irish Red, a lager somewhat in the Irish Red style; and with all its marketing muscle to backup this new venture, it found popularity in America.

Also, Ireland has a much longer history with the dry stout and porter then it does with the Irish Red. Maybe its Irish pride, a genetic taste for those dark brews, or stout dominated advertising, but the new kid just doesn't enjoy as much popularity there as its dark cousins.

Characteristics of an Irish Red Ale

The guidelines for the Irish Red Ale beer style are set by the Beer Judge Certification Program (BJCP) Style Committee. The below details are a summary of what an Irish Red Ale should represent.

Quick Characteristics

Color Range: 9–18 SRM

Original Gravity: 1.044–1.060

Final Gravity: 1.010–1.014

IBU Range: 17–28

ABV Range: 4.0–6.0%

Aroma: Low to Moderate Maltiness with Strong Caramel Notes; No Hop Aromas

Flavor: Caramel Maltiness with Notes of Toffee, Buttered Toast & Roasted Grains; No Hoppiness; Clean with Medium-dry Finish

Appearance: Ranges From Amber to Deep Reddish Copper With Slightly Tan Head

Mouthfeel: Medium-Light to Medium Body; Smooth with Moderate Carbonation; Alcohol Warmth Possible

Food Pairings: Lamb Chops, Reuben Sandwich, Shepherd's Pie, Mutton, French onion soup, Crème Brûlée

Appearance:

Most examples of this style will be amber to a deep reddish copper in color. They will be quite clear with a small off-white to just slightly tan colored head.

Aroma:

The nose will have a low to moderate malt aroma which is often caramel centered, but can have also display toasty or toffee-like notes. Some diactyl may be present creating a butter-like character to the overall malt aroma. Usually, hop aroma will not be present at all.

Mouthfeel:

A mid-light to medium in body is most common, although if diacetyl is present it will likely add a character that can present as slippery or smooth. The stronger examples may present with low alcoholic warmth, otherwise this beer should run smooth with moderate carbonation and attenuation.

Taste:

The most noticed flavor will be a moderate caramel maltiness, sometimes running into a buttered toast or toffee character, especially if diacetyl is present. The swallow will highlight light roasted grain qualities helping to dry out the finish. Usually little to no hop flavors; if present these should be light and steer more toward the English hop varieties. Roast grains may create the sense of more hop bitterness then is actually present, which will be in the low to mid-range. Should be clean and smooth with a medium-dry finish. If brewed as a lager it will have no ester presence, while an ale version should have no diacetyl and just a subtle bit of esters.

Irish Stout-15B-

Stouts are an off-shoot of the Porter family tree.

Irish Dry Stout

The word “stout” was first used in 1677 to refer to a stronger version of the Porter style. The use of “stout” in the context of strength continued on through the 1800’s. Both stout ales and stout porters were known until the end of the 19th century.

Daniel Wheeler’s invention of the malt kiln in 1817 opened up new doors in the brewing world and was undoubtedly one of the major factors in the birth of the stout. The whole color spectrum of roasted malt suddenly was available, and with it, each unique taste.

Arthur Guinness, who in 1759 signed a 9,000 year lease on a defunct old brewery, and had been brewing Porters since the late 1700’s, was intrigued by the new roasting technology. He began to use the high roasted malts in his beers to create the coffee notes, now famed in the Guinness stouts.

The early stouts brewed by Guinness and his competitors would have started out very similar to Porters of the day, and only over several decades would the more bitter, lighter bodied, but dryer Irish stout emerge. The old Guinness brewery at St. James Gate would first turn out their classic stout in 1840.

Style Profile & Characteristics

The guidelines for the Irish Dry Stout beer style are set by the Beer Judge Certification Program (BJCP) Style Committee. The below details are a summary of what an Irish Dry Stout should represent.

Quick Characteristics

Color Range: 25–40 SRM

Original Gravity: 1.036–1.050

Final Gravity: 1.007–1.011

IBU Range: 30–45

ABV Range: 4.0–5.0

Aroma: Expect Aromas of Coffee, Chocolate, Cocoa & Slight Graininess; Low Hoppiness (if any)

Flavor: The Roast Shines! May Notice Acidic Sourness, Bittersweet Chocolate and Moderate-to-High Hop Bitterness with Coffee-like Finish

Appearance: Ranges From Pitch Black to Deep, Rich Brown

Mouthfeel: Smooth & Creamy; Medium to Medium-Full Mouthfeel with Low Carbonation

Food Pairings: Salty & Fried Foods, Spicy Foods, Bold & Sweet Desserts

Appearance:

Color can run from an almost jet black to something slightly lighter, a deep rich brown. A creamy-soft, long-lasting tan to brown head is characteristic, and much expected.

Aroma:

Expect aromas of coffee coming from the roasted barely. It can have slight offerings of chocolate, cocoa, or very slight graininess present. Esters will be at the low end of medium but more often not present at all, the same with hop aroma.

Mouthfeel:

Usually mouthfeel runs smooth despite the high loads of hop bitterness and generous quantities of darker grain. It should have a medium to medium-full mouthfeel, low carbonation, with a creamy quality that is easy on the palate. Astringency might be present but in low quantities, never taking on any harsh qualities.

Taste:

Roast shines in this beer. May have some acidic sourness with possible bittersweet chocolate qualities through the palate to the dry coffee-like finish. Medium to high hop bitterness compliments the grainy sharpness. High creaminess plays the main balancing role, with slight fruitiness and low hop flavor possible additions in this beer that’s dark-malt heavy and should never hid that fact too well.

10 Thoughts on Brewing Irish Stout

Irish Stout Ingredients

Dry means less unfermentable, or complex sugars. Single and two- molecule sugars are easily fermented some complex sugars can be broken down to make fermentable simple sugars, but the more complex sugars in your mash the more unfermentable sugars you are likely to end up with.

To avoid those unfermentables avoid crystal malts, caramel, Munich, Vienna, any Carapils, or dexrin malts.

The base malt should be a high quality pale ale malt (Briess pale ale or Golden Promise, for example).

To get the dark color and roasty, possibly chocolate qualities, pass all the mid color malts, and go straight for the dark stuff. Dark chocolate, high roast, and black patent, work well in a dry stout.

Another option added to many dry stout recipes includes some unmalted adjuncts; corn, rice, or barley could be used at up to 20–30% of the mash. Flaked barley is probably the most common.

For extract brewers it is best to look for liquid extracts that are marketed for Irish stouts. This, with some careful additions of dark malt (dry or liqiud) and some adjunct flakes (see above) will produce the needed complexity and dryness.

Mash temperature is extremely important when making a dry stout. The right mash temperature converts more of those complex sugars you do not want in your finished beer into simple sugars that can be fermented out. A mash temperature of between 140°F and 150°F will give you the most beta-amylase activity (creates fermentable sugars). You want to avoid, as much as possible, peak alpha-amylase activity because this creates complex sugars that require more breaking down before they are fermentable.

I usually try to keep a dry stout mash temperature at about 148°F (peak activity of beta-amylase). Then when I sparge I use boiling water to raise the mash temperature as quickly as possible through the alpha-amylase work range to a mash-out temperature of 172°F. Keeping the temperature here during sparge runoff slows alpha-amylase activity. Don’t push your temp above 176°F though, because you don’t want to denature the alpha amylase either.

Traditionally soft hops were used for both bittering and flavor. You want to create a balance to the maltiness without having the hops show through too much. One option is Fuggles for bittering and East Kent Goldings for aroma and flavor. Other varietes will work, just make sure you stick with European varieties for more authenticity.

Because you want everything fermented out the yeast needs to be a work horse of the first order and tradition would have it an Irish variety. Wyeast London ale yeast and Wyeast Irish ale would both be good examples.

Irish Extra Stout-15C

Take your stout and give it more coffee, roasty, malty richness

Early earthy hop additions. High bitter, medium flavor

Full-ish body

Up your stout grain bill to hit higher OG of 1.052-1.062

Barrels would be fun for these

As with all stouts, Foreign Extra Stout is defined by a single brewery, Guinness. It was also known as Foreign Export Double Stout and West Indies Porter at different dates.

West Indies Porter was brewed occasionally during the early 1800's. It later became known as triple stout. After 1896 it was called Foreign Export Double Stout and is the forerunner of what we now call Foreign Extra Stout. This beer had the same gravity as Guinness' Double Stout/Extra Stout but had more hops added and was aged longer. The longer aging added a little more ABV, about 0.8%.

These beers were originally traditional Irish Dry Stouts that were brewed to make the long journey to the tropical regions. The higher alcohol and hopping helped the stout make the long sea journey to the colonies.

Today, the more traditional Foreign Extra or Export Stouts will be found in the tropical regions of the world as many are still brewed there today. Most have a more pronounced roast character than the dry Irish stout.

The style is usually bigger than either the Oatmeal Stout or the Sweet Stout. The best examples of the style have a stronger coffee and chocolate character in the aroma and flavor. The esters from fermentation, the higher alcohol and the dark malts used give these beers dark fruit.

Many people confuse the hallmark beer in this category, the Guinness Foreign Extra Stout with another Guinness offering, the Guinness Extra Stout. One big difference is the alcohol content. The alcohol content of a Guinness Extra Stout is 5.6% ABV and the alcohol content of the Guinness Foreign Extra Stout is 7.5% ABV. According to the Guinness website, the Guinness Extra Stout is "Sharp and crisp to the taste, it's an entirely different experience from the smooth, creamy Guinness Draught and punchier Foreign Extra Stout".

It is a rather broad style which encompasses literally everything below a Russian Imperial Stout but stronger than a Dry Irish Stout. The style can be drier and less fruity as in the export versions, or it can be sweeter with more of a fruity character like those brewed in the tropics today. So you are looking at two distinct versions.

Brewing Tips:

To make the two different versions of this style, the difference will primarily be in the yeast selected. For the drier less fruity export version, use a clean fermenting yeast such as Wyeast 1056 American Ale yeast or White Labs WLP001 California Ale yeast. These yeasts tend to attenuate more leaving a drier cleaner beer.

For the sweeter fruiter version, use an English yeast which will leave some residual sugar and provide the fruity esters you are looking for. Be sure to give the beer a diacetyl rest when using the English yeast as diacetyl is not appropriate in the style.