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AUTUMN SEASONAL BEER



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Autumn Seasonal Beer

by Gordon Strong

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AUTUMN SEASONAL BEER BY THE NUMBERS

OG:Varies
FG:Varies
SRM: . . .Varies, typically 11–19
IBU:Varies, typically low
ABV:Varies, typically > 5%

Fall is my favorite season of the year. The hot days of summer are over, the leaves start turning colors, football is back, and my brewing season begins anew. During these cooler days, you can also find some great seasonal beers on the shelves. Aside from the delightfully malty Oktoberfest beers, you can also find a range of craft-brewed pumpkin and harvest beers. The 2015 Beer Judge Certification Program (BJCP) Style Guidelines has a new category for pumpkin beers, category 30B: Autumn seasonal beer.

In past years, beers like this would be entered in the specialty beer category, along with all the black IPAs, rye beers, *Brett* beers, and whatever other brewing *fad du jour* was in vogue. One major difference in the newer style guidelines is that there are now many categories and styles of specialty beers. This allows beers to be better identified, and in larger competitions, judged separately so that judges aren't overwhelmed with huge varieties of flavor.

While the autumn seasonal beer category can allow for a range of interpretations, there are a few requirements. First, it must be a spiced beer. Other flavors can include sugary adjuncts, such as molasses, brown sugar, maple syrup, honey, or similar ingredients. Vegetables (typically squashes or gourds, but most frequently pumpkin) can be included; note that the culinary, not the botanical, use of the word vegetable is used in the BJCP guidelines. A base style must be declared but it doesn't have to be a classic style (i.e., a named style in the BJCP guidelines) – it is perfectly reasonable to describe the base beer as something like, “a malty amber ale.”

The overall impression is what matters the most in specialty-type beers. In autumn seasonal beers, the goal is to have a balanced, drinkable beer that complements the cool-

weather season and evokes American fall traditions, such as Halloween, Thanksgiving, and fall harvest festivals. Some examples, such as pumpkin beers, mimic many of the food flavors found on the Thanksgiving table.

SENSORY PROFILE

I'm going to focus on pumpkin beer as the primary example for this column. Note that the autumn seasonal beer style is found within Category 30, spiced beer – hence the requirement for spicing.

The base beer style can vary widely, but is typically something malty and often in the amber to copper color range. There are some good examples that use darker beers, although often the roasted malts can combine for unusual flavors, or start suggesting gingerbread, a more winter seasonal beer flavor.

The balance is often malty, with the bitterness restrained. The body and sweetness are often a bit higher than average. As with most spiced beers, late hops are typically restrained or omitted since they can interfere with the spicing. The alcohol level is usually on the high side of average (over 5%), but not extreme. Some imperial-strength (9% and up) examples can be found, but I don't find the alcohol adds to the experience. Warming spices and burning alcohol can be a major detraction, so larger examples should be properly aged so the alcohol isn't prominent.

Even if the beers aren't sweet, they are typically malty and with at least medium body. Additional dextrins make the beer slightly more chewy, which leads to an impression of richness.

When you make beers in the amber to copper color range, you typically can get malt flavors that are toasty, bready, nutty, and rich. These flavors help support the pumpkin pie impression, as they might suggest pie crust, or some flavors in the filling.



LIQUID PUMPKIN PIE

(5 gallons/19 L, all-grain)

OG = 1.054 FG = 1.014

IBU = 15 SRM = 13 ABV = 5.4%



INGREDIENTS

4 lbs. (1.8 kg) UK Golden Promise™ malt
2 lbs. (0.91 kg) German Vienna malt
1.5 lbs. (0.68 kg) German dark Munich malt
12 oz. (0.34 kg) flaked oats
12 oz. (0.34 kg) flaked wheat
12 oz. (0.34 kg) Belgian Caravienne® malt
6 oz. (0.17 kg) UK brown malt
2 oz. (57 g) UK chocolate malt
4.1 AAU UK Goldings hops (60 min.) (0.7 oz./20 g at 5.9% alpha acids)
8 oz. (0.23 kg) natural brown sugar (15 min.)
3 oz. (85 g) light molasses (15 min.)
9 lbs. (4.1 kg) canned pumpkin puree (plain, unspiced)
6 cinnamon sticks, broken up (0 min.)
1.5 Tbsp. crystalized ginger, chopped (0 min.)
1 whole nutmeg, chopped (0 min.)
10 dried allspice berries, crushed (0 min.)
0.25 tsp. ground mace (0 min.)
4 green cardamom pods, split, husks discarded, seeds crushed (0 min.)
Wyeast 1272 (American Ale II) or White Labs WLP051 (California Ale IV) yeast
¾ cup corn sugar (if priming)

STEP BY STEP

Make a 1-qt. (1-L) yeast starter 2–3 days before brew day.

Prepare the pumpkin (can be done the night before). Spread puree into a large baking dish. Roast at 400 °F (204 °C) for about an hour, stirring every 15 minutes, until fairly dry and caramelized but not burned. Put in a fine mesh bag. If prepared the night before, allow to cool, cover, and refrigerate until brew day. Remove from refrigerator and bring to room temperature before using.

Prepare spices and place them in a fine mesh bag.

I use reverse osmosis (RO) water. Add ¾ tsp. 10% phosphoric acid per 5 gallons (19 L) of brewing water, or until water measures pH 5.5 at room temperature. Add 1 tsp. calcium chloride (CaCl₂) to the mash. On brew day, mash in the first five malts and grains at 131 °F (55 °C) in 15 qts. (14 L) of water, and hold this temperature for 15 minutes. Raise the temperature by infusion or direct heating to 149 °F (65 °C) for 30 minutes. Raise the temperature to 158 °F (70 °C) for 30 minutes. Finally, raise to 168 °F (76 °C) to mashout. Add the pumpkin in the mesh bag, and the Caravienne®, brown and chocolate malts, and recirculate for 15 minutes, recirculating over the top and through the mesh bag. Fly sparge with 168 °F (76 °C) water until 6.5 gallons (25 L) of wort is collected. After the wort has been collected, add the mesh bag of pumpkin to the kettle. Remove the bag when the wort has come to a boil, allowing liquid to drip back into the kettle.

Boil the wort for 90 minutes, adding the hops, sugar, and molasses at times indicated. After the heat is turned off, add the spices and let steep for 10 minutes. Remove the spices and let the wort stand for an additional 10 minutes before chilling to 66 °F (19 °C).

Oxygenate, then pitch the yeast starter. Allow fermentation temperature to rise to no more than 70 °F (21 °C) until fermentation is complete. Rack and allow the beer to drop bright, using crash cooling or fining if necessary. Adjust spices to taste, if desired. Prime and bottle condition, or keg and force carbonate to 2 to 2.5 volumes.

LIQUID PUMPKIN PIE

(5 gallons/19 L, extract with grains)

OG = 1.054 FG = 1.014

IBU = 15 SRM = 13 ABV = 5.4%



INGREDIENTS

6.3 lbs. (2.9 kg) amber liquid malt

extract
12 oz. (340 g) Belgian Caravienne® malt
6 oz. (170 g) UK brown malt
2 oz. (57 g) UK chocolate malt
4.1 AAU UK Goldings hops (60 min.) (0.7 oz./20 g at 5.9% alpha acids)
8 oz. (0.23 kg) natural brown sugar (15 min.)
3 oz. (85 g) light molasses (15 min.)
9 lbs. (4.1 kg) canned pumpkin puree (plain, unspiced)
6 cinnamon sticks, broken up (0 min.)
1.5 Tbsp. crystalized ginger, chopped (0 min.)
1 whole nutmeg, chopped (0 min.)
10 dried allspice berries, crushed (0 min.)
0.25 tsp. ground mace (0 min.)
4 green cardamom pods, split, husks discarded, seeds crushed (0 min.)
Wyeast 1272 (American Ale II) or White Labs WLP051 (California Ale IV) yeast
¾ cup corn sugar (if priming)

STEP BY STEP

Follow the same yeast, pumpkin, and spice preparations as in the all-grain version.

On brew day, bring 6 gallons (23 L) of water up to 158 °F (70 °C). Place the pumpkin (still in the mesh bag), and the Caravienne®, brown, and chocolate malts in another mesh bag, and steep in the hot water for 30 minutes. Remove the mesh bags, then turn the heat off.

Add the liquid malt extract and stir thoroughly to dissolve the extract completely, making sure not to burn it. Put the pumpkin mesh bag back in, turn the heat back on and bring to a boil. Once boiling, remove the pumpkin, allowing liquid to drip back into the kettle. Boil the wort for 60 minutes, adding the hops, sugar and molasses at the times indicated in the recipe.

Follow the remainder of the all-grain version of this recipe.

Likewise, sugary adjuncts like brown sugar and molasses are often found in pumpkin pie recipes and are welcome in this style.

Flavors from pumpkins, squash, or gourds are often hard to detect, but they can play well in this style, particularly if those flavors are roasted or caramelized to bring out the flavors. The interplay between the malt, the pumpkin or other squashes, the spices, and the sugars is the key to evoking the mental image of the season or the specific dessert. A properly balanced pumpkin beer will showcase all these flavors, but in a way that is pleasant to drink without any being over-the-top.

SPECIALTY INGREDIENTS

Since this is a spiced beer, let me start with the spices first. When I make a pumpkin beer, I like the overall impression to be like pumpkin pie, so I choose spices that are typically associated with that dessert. You can find pumpkin pie spice blend in supermarkets, and that makes an acceptable ingredient. However, in my spiced beers, I like to start with whole spices and make my own blends.

A review of commercial products and published recipes reveals some common elements to the pumpkin pie spice blend. The ingredients that seem to be in all recipes are cinnamon, ginger, and nutmeg. Most have allspice or cloves, or both, and a few have mace. A small number of recipes might have other minor ingredients, but these warm and sweet spices are most common. The proportions vary in all the recipes, although cinnamon is typically used in the highest proportion.

I have a preference for spices from Penzeys (www.penzeys.com) but any reputable spice merchant will do. Just try to buy fresh; old, oxidized spices will not be the same, and pre-ground spices must be very fresh. Freshness matters more than country of origin, although there is a considerable difference in flavor. Genuine cinnamon generally comes from Ceylon, and cassia cinnamon can come from Vietnam, China, or Indonesia. They

have different flavors and aromatic qualities and intensities, so test which you prefer. Penzeys also makes a blend of four cinnamons, which may be your best choice when using powdered cinnamon.

Although pumpkin pie spice often includes cloves, I omit these from my recipes since too many beer judges see any clove flavor as an indication of a yeast-related brewing problem (such as an infection with wild yeast). Even if clove is declared as an ingredient, I've had judges criticize it. If you are entering your beer into competition it's better to stick to allspice instead, which has a similar but less objectionable quality. If you aren't brewing for competition (or you really like cloves), this obviously isn't a problem.

Nutmeg and mace are two spices from the same species of tree; nutmeg is the seed, while mace is a lacy covering. They have similar flavors, although nutmeg can be a bit sweeter and mace a little more delicate. Used together, they increase the complexity of the spice blend.

Ground ginger is typically used in the spice blend rather than fresh ginger since it is more recognizable as a typical pumpkin pie ingredient. I sometimes use crystallized or candied ginger instead in my brewing recipes. I typically grind whole spices in a mortar and pestle, or chop them with a kitchen knife. I put them in a fine mesh bag to use, then use them as with making tea (steep in near-boiling water for several minutes to extract the essential oils and flavors, then remove). Fresh ginger is an interesting variation, but it is quite intense and more difficult to balance with the other spices.

Pumpkin is the next major specialty ingredient to cover. I want to talk about the types of pumpkin, the forms of pumpkin, and how it is handled during brewing.

The first thing to understand about pumpkins is that there are two major types, sugar (or pie) pumpkins and field pumpkins. Field pumpkins are the familiar large, thick-skinned, starchy varieties that are carved into

jack-o-lanterns. They are not used in cooking, and shouldn't be used for brewing (although large ones can be used as an interesting serving vessel).

Sugar/pie pumpkins are smaller and are the varieties used in recipes, and are what can be found in cans for making pumpkin pie. Harvested ripe, these pumpkins are naturally sweet and flavorful, and can be used in food recipes. Ripe squashes and gourds used in cooking can be treated in much the same way. When used raw, split the pumpkin or squash in half, remove the seeds, place cut side down on a baking sheet, and roast in a 350 °F (177 °C) oven for an hour or until fork-tender. Cool, remove the flesh from the skin, mash or puree in a food processor, then use in the recipe. Or just buy the equivalent (unspiced) pumpkin puree in cans.

Pumpkin puree contains a fair amount of water, so I like to roast it to dehydrate it a bit and also to caramelize the sugars. I roast it in a 400 °F (204 °C) oven for an hour to an hour and a half. I put it in a baking dish and turn it with a spatula every 15 minutes. Watch it if it starts to burn.

I know of many people that recommend adding pumpkins to the mash. However, this is not necessary when using sugar pumpkins. Pumpkins are ripe vegetables, so the starches are naturally converted to sugars (a process enhanced through roasting). Mashing field pumpkins will introduce starch (and water), but won't add much flavor. Even sugar pumpkins lose character in the mash. I find that using them in the boil adds more flavor and some nice orange color.

I tend to put my roasted pumpkin puree in a fine mesh bag (like a grain steeping bag), then add it during the sparge. I rinse flavors then, and also put it in the boil kettle to extract additional flavor and color. Using a bag is critical since the pumpkin can be very difficult to separate later. In the fermenter, it tends to float and form layers that are hard to rack. So it's best to remove the pumpkin earlier, or at least attempt to filter it out

when racking to the fermenter.

HOMEBREW EXAMPLE

Having an inspiration for your specialty beers is a good recommendation, so think of your favorite pumpkin pie recipe. Or pick something else you like, perhaps a seasonal pumpkin spice latte from the coffee shop or a pumpkin spiced ice cream. Whatever you choose, it helps if you have a mental image of the flavor profile as a reference.

My pumpkin pie beer uses a large amount of pumpkin puree, almost an equal weight as malt. I use a collection of whole and ground spices, including some interesting character spices such as green cardamom for added complexity. Sometimes I like to include a vanilla bean or add some vanilla extract to the finished beer for a pumpkin pie *à la mode* version. I roast store-bought canned pumpkin puree as described in the recipe on page 2.

For my base beer, I select a range of bready, toasty, rich malts that could be used in Märzen or English brown ale styles. Golden Promise™ malt adds a toasty-bready flavor without being excessively biscuity. Vienna and dark Munich malt bring clean malty richness and depth. I use some English brown malt for added toasty-bready complexity, and Belgian Caravienne® for some light sweetness. Chocolate malt darkens the color without adding much flavor. I also use some flaked oats and wheat to increase the body and mouthfeel of the beer, mimicking the creaminess of a pumpkin pie.

I select some sugary adjuncts for added flavor. I like some brown sugar, as well as light molasses. Do not use blackstrap molasses; the flavor is too burnt and licorice-like. I prefer raw, unprocessed sugars, so you might experiment with what you can find in your local market. Look at the ingredients on the package; if it is white sugar with molasses, avoid it.

I step mash my grains, which I find helps improve clarity and attenuation, but I use some higher temperature rests to increase the dextrin content of the beer. I keep IBUs

restrained since I want the impression of sweetness more from the absence of bitterness rather than the presence of sweetness. This helps improve drinkability.

Almost any relatively neutral or lightly fruity yeast strain will work. I've selected one of my favorites, Wyeast 1272 (American Ale II). I've also made this with Wyeast 1318 (London III), Wyeast 1335 (British II), and Wyeast 1968 (London ESB). Hops are simply for bittering; avoid anything that will have citrusy or piney flavors, or that are otherwise pungent. English or German hops would be my preference.

After the beer is finished and is ready to package, taste it again and see if any specific spices are too low. If they are, make a tea with some of the spices you wish to infuse. I tend to use fresh ground spices, and steep them in boiling water for about five minutes before filtering. Then I'll blend in this tea to taste with the final beer. For specific individual flavors, you may use another form of spice, such as cinnamon oil or vanilla extract. Be careful because you can't really take spices out. If you overspice your beer, you'll have to let it age longer to tone down the spices, or blend the beer with a less spiced batch.

I've used spices in the whole batch of beer to give a general spice level that I find tastes good. If you are concerned about overspicing your beer, you can make a tea out of all the spices and blend post-fermentation. Just be sure to mix the tea completely in the beer before you taste it, since it is also easy to overspice due to blending variations. My preference is to add some spices to the beer during the boil, and tweak later rather than add the entire spicing afterwards.

If you are in your local craft beer store, take a look at the seasonal offerings and try some to get ideas. I also recommend taking notes of things you don't like so you can avoid them in your pumpkin beers. Some of the things I've tasted that I don't think work too well in this style are overly bitter beers, hoppy beers, high-

alcohol beers, dark, roasty beers, and barrel-aged beers. They all just have too much flavor, and those flavors tend to either clash with or dominate the pumpkin and spice flavors. It's hard to put too much pumpkin flavor in, but it's easy to overspice the beer — a deft hand is required.

If you are lucky enough to be local to an area that has a pumpkin beer festival (two of my favorites are held by Cambridge Brewing Company and Elysian), go check out the offerings. You may taste some wacky beers, but think about what beers you would enjoy drinking by the pint and you may get some additional inspiration. 

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