

FREE WILLAMETTE

California Common – 5.5 Gal - OG 1.051 – FG 1.010 – ABV 5.3% - IBU 31 – SRM 17

Back in the 19th century, during the California gold rush, steam beers were one of the most popular beers drank by the working class. In San Francisco alone there were up to 25 breweries brewing steam beers in the 19th century. Since then, this style has fallen out of favour. There are only a handful of breweries producing steam/common beers.

A couple of years ago we brought in a couple of pitches of Escarpment Labs Cali Common Yeast (*now re-branded to Goldrush Lager*). They didn't sell before they expired, so we did what we always do when we have expired yeast – we make a starter and brew a beer around it.

Big surprise to us, the beer was amazing! It was probably my (Connor) favourite beer I made in 2018. I wanted to make another, but Escarpment Labs rarely has pitches of that one available, so we waited. Finally, back in the summer of 2019 they had it available and we made a slightly modified version of the original. At the time we had a LOT of Willamette hops (hence the name). Like the original, the beer turned out awesome. We decided to submit it to a homebrew competition. Lo and behold, it did well! **Winning silver at the Blazing Paddles Brew Competition.**

Now, it is November and the weather is turning cold. We thought it was the perfect time to make this the beer of the month. Because steam beers are similar to a lager, they require a cooler fermentation temperature than a standard ale. 16°C is the ideal temp to ferment them at. Basements and cold cellars are right around this temperature this time of year.

The resulting beer is dark and appears imposing. Yet it is still light, with a crisp flavour that has accentuated malty flavours with a solid hop backbone.

Ingredients

Grains	Amount (lbs)	
Maris Otter	8.5	
Munich Dark	1.0	
Crystal Light	0.5	
Chocolate	0.2	
Acidulated Malt	0.25	
Hops	Amount (oz)	Boil Schedule (minutes)
Willamette (4.6%)	1.25	60
Willamette (4.6%)	1.5	15
Willamette (4.6%)	1.25	0 (Flameout)
Yeast		
Goldrush Lager	1 Package – Escarpment Labs	
Extras		
Irish Moss	1 tsp for last 15 minutes of boil	
Dry Malt Extract	150g at bottling for priming	Or Dextrose

Important Tips on Brewing

- Be extra cautious when it comes to cleaning! Once you have stopped boiling your wort everything that gets in contact with the beer **MUST** be sanitary.
- The temperature of your mash is **ABSOLUTELY CRITICAL**. Not being in the 150-155f range can drastically affect your beer. Make sure you correct the temperature ASAP once all of the grain has been added to the mash.
- Always let your beer ferment for 10 days! Do not disturb it, do not open the lid. It is absolutely natural for the airlock to stop bubbling after a few days, it is still fermenting though.
- Before bottling, make sure you use a priming calculator (many can be found online) to verify the amount of sugar that needs to be added.

[Step by step Instructions on the other side](#) →→→

Instructions

Mashing -> converting the grain into a fermentable liquid.

- 1) Bring 6 gallons of water in your brew pot to 155°F. This is our strike temperature. Turn off the heat to the pot.
- 2) Wrap the muslin/nylon bag around the brew pot and slowly pour all the milled grains into the bag. Stir them in while adding to prevent clumps. The addition of grain should drop the temperature down to 150-155°F.
- 3) We want to mash the grain at 152°F for 60 minutes. It is very important to hold the temperature at 152°F. If the temperature rises above 155°F it hurts the fermentation, or if it dips below 149°F it can lead to a thinner tasting beer.
 - a. The first 15-30 minutes are essential for the success of your brew. The temperature HAS TO BE IN THE RANGE OF 150-155°F. Sometimes adding the grain to the strike water does not lower the temperature enough, in this case add a little bit of cold water to bring the temperature down. Cover the pot with your lid and let it sit.
 - b. Most brew pots will be able to maintain 152°F without adding heat for 20 minutes, we recommend checking the temperature every 15 minutes, and if it drops add more heat to bring it up. We recommend opening the lid and using a thermometer in the liquid.
- 4) After 60 minutes, bring the temperature of the mashing grain up to 170°F and hold for 10 minutes. This is our mash out.
- 5) Time to remove the grain. Lift the bag full of grain out of the brew pot. Let the liquid in the bag dribble into your wort. Once that is done, put the bag inside of a brewing pail, or another empty pot. There will be about 4 gallons of wort in the brewpot, we need to get it to 6 gallons before we can begin the next stage.
- 6) Run warm water through the grains in the bag, aim for 170°F – let it run through the grains and add to the brewpot. Add until you reach 6 gallons.
 - a. PSA: It is natural to think that the grains need to be squeezed to get all of the liquid out of them, **DO NOT DO THIS**. Aggressively squeezing the grains will lead to tannin extraction and a doughy taste in your beer. Lightly pressing the bag is fine, but do not try to squeeze every last drop out.

Boiling -> Hop addition time

- 1) Bring 6 gallons of your wort to a rolling boil, and let it boil for 5 minutes, this is called the hot break.
- 2) Add 1.25oz of Willamette to the pot and set a timer for 60 minutes, keep the wort boiling (212°F) and uncovered.
- 3) With 15 minutes left in the timer add 1.5oz of Willamette, the Irish Moss, and if you're using a wort chiller add that too.
- 4) When your timer goes off, turn off the heat, add the final 1.25 ounces of Willamette hops and proceed to the cooling stage.
- 5) Now it's time to cool the beer down to 75°F (20-25°C) as quickly as possible.
 - a. We love using a wort chiller for this, it can get the beer down to temperature in 20-30 minutes. Otherwise, you can immerse the brew pot in an ice bath or wait it out. The longer it takes, the greater the risk of infection

Fermentation -> Turning the wort into beer

- 1) After the boil is done it is time to be extra careful in regard to sanitation. We recommend using a no-rinse sanitizer called Starsan. Mix ¼ tsp of it with water in a 500ml spray bottle. Before we touch any part of the beer we spray it with Starsan.
- 2) Transfer the cooled wort into your fermenting pail or carboy. Run it through a strainer to catch any hop or grain residue.
 - a. It is also an important time to take a hydrometer reading. It should be around 1.051 give or take a few points.
- 3) Your choice of fermentation vessel is important. During primary fermentation, it will bubble up quite a bit, you want to be sure there is airspace for it to work away. Otherwise the pressure of it will push out the airlock.
- 4) Make sure the wort has been cooled to at least 25°C!!! Adding yeast at a higher temperature will likely kill it.
- 5) Once the beer is in the fermenter, pour in the entire package of Goldrush Lager yeast.
- 6) Put the bung and airlock in the hole (make sure there is water filled up to the line in the airlock). If using a pail, make sure the lid is sealed tight. **Put the pail in a room that is in the range of 15-17°C.**
 - a. *If you do not have a room that is in that temperate range, the beer will still ferment, but there will be a little ester development in the taste of the beer. Nothing too serious, but it won't taste as clean as it would if fermented at the proper temperature.*
- 7) After 8 days have passed, move the fermenter into a room or area that is 20°C and keep it there for two days.
- 8) It has now been 10 days of fermentation. The beer should be ready for the bottling stage now. If you are not ready to bottle yet, the beer can sit safely for a few more days, just don't open the lid until you are ready to bottle!!! Once ready, take a hydrometer reading. It should be somewhere between 1.010-1.014.
 - a. *Lately, we have been of the opinion that secondary is an unnecessary step. Unless you are kegging, we recommend proceeding to the bottling stage. Clarification can occur in the bottle rather than in a carboy, and the risk of oxidization is greatly reduced.*

Bottling -> We're getting close to Beer Time now.

- 1) Rack the now fermented beer into a bucket.
- 2) At the same time, mix the priming sugar with 300ml of boiling water and add to the beer. Stir it in VERY gently.
 - a. Make sure to check out a priming calculator to verify the correct amount of sugar. Too much sugar and your beer will end up foamy, or even start blowing the caps off! Too little and the beer won't be fully carbonated.
- 3) Rack the beer into your bottles or growlers. Then, let them sit for 2-3 weeks at room temperature. Chill and enjoy!