League House Party Hazy (AG)

New England IPA (21 B)

Type: All Grain
Batch Size: 23.00 L
Boil Size: 28.50 L
Boil Time: 60 min
Final Bottling Vol: 22.00 L
Fermentation: Ale with Lallemand Kveik Yeast

Date: 19 Aug 2021
Efficiency: 75.00 %
Est Mash Efficiency: 81.5 %



Brewing Notes:
This recipe has a small boil hop addition, most of the bitterness comes from the steep/whirlpool addition. The average temperature of the hop stand should be around 80C. Once fermentation is complete, any exposure to oxygen will impact the beer flavour and aroma. This recipe also uses a large amount of steep/whirlpool and dry hops. Suggest using a hop spider for the steep/whirlpool addition and hop bags for the dry hop additions.

The large dry hop additions should cause some 'dry hop creep' which will result in additional fermentation of previously unfermentable sugars. A lower FG and higher ABV than is predicted can be expected. The commercial version of this beer finished at 1.004 with an ABV of 6.5%.

The kveik yeast used supports a wide range of fermentation temperatures between 25-40°C with a very high optimal range of 35-40°C. A very fast fermentations can be expected when fermented within the optimal temperature range, therefore, the first dry hop addition is 24 hours after pitching the yeast. Note, if fermented at the low end of the temperature range, expect fermentation to take a little longer than indicated below.

The suggested mineral additions assume an average NZ water profile and should be fine for most NZ water sources. The target water profile in ppm is Ca - 110, Mg - 10, Na - 10, SO4 - 75, Cl - 150.

1. If flavour minerals are available, add to boil only as mash pH is taken care of with the acid malt.
2. If available, add the lactic acid to the sparge water prior t heating.
3. If available, add kettle finings and yeast nutrient 15 min before the end of boil.
4. Cool the wort to 80C, add the whirlpool hops and maintain 80C for 20 min. Once complete, cool the wort quickly to transfer temperature.
5. It is recommended that the yeast be rehydrated per the manufacturer's instructions. Pitch at 28C and let rise to 30C.
6. After 24 hours, add the first dry hop addition and let rise to 35C if possible.
7. Add the second dry hop addition near the end of fermentation. Depending on the fermentation temperature, this can be as little as another 1 - 2 days.
8. Ferment for another 3-4 days to ensure full attenuation and diacetyl removal by the yeast.
9. If possible, cold crash for a few days before packaging.
10. Use care to minimize or eliminate exposure to oxygen during cold crashing and packaging.
11. Carbonate to 2.5 - 2.7 volumes of CO2.
12. For peak flavour and aroma, this beer is best consumed fresh.

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
2.600 kg	BEST Pilsen Malt (BESTMALZ) (3.5 EBC)	Grain	1	47.7 %	1.70 L
0.900 kg	Gladfield Vienna Malt (6.8 EBC)	Grain	2	16.5 %	0.59 L
0.550 kg	Big O - Malted Oats (4.5 EBC)	Grain	3	10.1 %	0.36 L
0.550 kg	Gladfield Wheat Malt (4.2 EBC)	Grain	4	10.1 %	0.36 L
0.550 kg	Harraway's Rolled Oats (2.8 EBC)	Grain	5	10.1 %	0.36 L
0.300 kg	Gladfield Sour Grapes Malt (4.0 EBC)	Grain	6	5.5 %	0.20 L

Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 18.22 L of water at 72.1 C	67.0 C	60 min
Mash Out	Heat to 77.0 C over 10 min	77.0 C	10 min

◯ Fly sparge with 15.74 L water at 75.6 C
◯ Add water to achieve boil volume of 28.50 L
◯ Estimated pre-boil gravity is 1.046 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
6.00 g	Mosaic (HBC 369) [12.60 %] - Boil 60.0 min	Hop	7	8.1 IBUs	-
10.20 g	Calcium Chloride (Boil)	Water Agent	8	-	-
4.40 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	9	-	-
0.50 Items	Whirlfloc Tablet (Boil 15.0 mins)	Fining	10	-	-
1.50 g	Yeast Nutrient (Boil 15.0 mins)	Other	11	-	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
80.00 g	Nectaron (HORT 4337) [11.00 %] - Steep/Whirlpool 20.0…	Hop	12	12.7 IBUs	-
16.00 g	Mosaic (HBC 369) [12.60 %] - Steep/Whirlpool 20.0 min, 8…	Hop	13	2.9 IBUs	-

◯ Estimated Post Boil Vol: 26.00 L and Est Post Boil Gravity: 1.053 SG

Cool and Transfer Wort

◯ Cool wort to fermentation temperature
◯ Transfer wort to fermenter
◯ Add water if needed to achieve final volume of 23.00 L

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
1.0 pkg	Voss Kveik Ale Yeast (Lallemand #)	Yeast	14	-	-

◯ Measure Actual Original Gravity _____ (Target: 1.053 SG)
◯ Measure Actual Batch Volume _____ (Target: 23.00 L)

Fermentation

◯ 19 Aug 2021 - Primary Fermentation (1.00 days at 28.0 C ending at 28.0 C)
◯ 20 Aug 2021 - Secondary Fermentation (5.00 days at 35.0 C ending at 35.0 C)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
60.00 g	Nectaron (HORT 4337) [11.00 %] - 5.0 Days Before Bottlin…	Hop	15	0.0 IBUs	-
14.00 g	Mosaic (HBC 369) [12.60 %] - 5.0 Days Before Bottling for…	Hop	16	0.0 IBUs	-
60.00 g	Nectaron (HORT 4337) [11.00 %] - 4.0 Days Before Bottlin…	Hop	17	0.0 IBUs	-
14.00 g	Mosaic (HBC 369) [12.60 %] - 4.0 Days Before Bottling for…	Hop	18	0.0 IBUs	-

◯ Measure Final Gravity: _____ (Estimate: 1.009 SG)
◯ Date Bottled/Kegged: - Carbonation: Keg with 16.06 PSI