

## Batch #26 - 6 Nov 2022

## Two Pints and a Packet of Hops (Fuggle and Progress) - 4.2%

## Best Bitter

Brewer: The Thirsty Otter

Type: All Grain

IBU : 27 (Tinseth)  
 BU/GU : 0.61  
 Colour : 11 EBC  
 Carbonation : 1.8 CO2-vol

Pre-Boil Gravity : 1.013  
 Original Gravity : 1.037  
 Total Gravity : 1.044  
 Final Gravity : 1.012

## Fermentables (129 g)

111 g - Low Colour Maris Otter 3 EBC (86.1%)  
 ^ Lot # 694-201130-111430-176081-1/1  
 ^ The Malt Miller (UK) MAL-00-073  
 6 g - Crystal Medium 175 EBC (4.8%)  
 ^ Lot # 694-201130-111430-176081-1/1  
 ^ The malt Miller (UK) MAL-01-035  
 6 g - Amber Malt 50 EBC (4.6%)  
 ^ Lot # 694-201130-111430-176081-1/1  
 ^ The Malt Miller (UK) MAL-02-000  
 6 g - Wheat Malt 4 EBC (4.6%)  
 ^ Lot # 694-201130-111430-176081-1/1  
 ^ The Malt Miller (UK) MAL-04-004  
 3 g - Bottling - Sugar, Table (Sucrose) 2 EBC  
 ^ Albert Heijn (NL)

## Hops (5.1 g)

60 min - 0.4 g - Fuggle (Whole) - 5% (8 IBU)  
 ^ Worcester Hop Shop (UK)  
 30 min - 0.7 g - Fuggle (Whole) - 5% (10 IBU)  
 ^ Worcester Hop Shop (UK)  
 15 min - 0.7 g - Fuggle (Whole) - 5% (7 IBU)  
 ^ Worcester Hop Shop (UK)

## Hop Stand

20 min hopstand @ 75 °C  
 20 min 75 °C - 2 g - Fuggle (Whole) - 5% (3 IBU)  
 ^ Worcester Hop Shop (UK)

## Dry Hops

4 days - 1.3 g - Progress - 7.6%  
 ^ Hopeye (GB) HE-50G-HOPS-PROGRESS (50 grams)

## Miscellaneous

Mash - 0.039 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 0.104 g - Calcium Chloride (CaCl2) 33...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.102 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 0.158 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 0.202 g - Gypsum (CaSO4)  
 ^ Brouwmaatje (NL)  
 Mash - 0.054 ml - Lactic Acid 80% 80%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3

## 01 Brouwpunt 5L (60min) (rev 4)

Batch Size : 0.75 L  
 Boil Size : 2.71 L  
 Post-Boil Vol : 0.91 L

Mash Water : 0.39 L  
 Sparge Water : 2.56 L  
 Boil Time : 60 min  
 Total Water : 2.95 L



11 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 83.3%

## Mash Profile

01 One Step Mash (60 min)  
 73.2 °C - Strike Temp  
 67 °C - 60 min - Temperature

## Fermentation Profile

01 Ale + DR + Conditioning  
 18 °C - 10 days - Primary  
 20 °C - 4 days - Diacetyl rest  
 18 °C - 14 days - Carbonation  
 18 °C - 28 days - Conditioning

## Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...)  
 Ca 156 Mg 41 Na 131 Cl 217 SO 445 HCO 87

SO/Cl ratio: 2.1

Mash pH: 3.27

Sparge pH: 6

## Measurements

Mash pH:

Boil Volume:

Pre-Boil Gravity:

Post-Boil Kettle Volume:

Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity: 1.013

Bottling Volume: 0.66

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## Recipe Notes

Target: ABV = 4.1 %, IBU = 29, OG = 1.043, FG = 1.011  
Tweaked the hop bill.  
Changed liquid yeast for a dry yeast.  
Malt is ordered with standard crush @ The Malt Miller (<https://www.themaltmiller.co.uk/>).

## Batch Notes

07-11-2022 19:30 Pitched 0.7 grams yeast @ 18.7 C.

### Day 1 in fermentation

08-11-2022 00:00 16.1 C.  
08-11-2022 04:00 16.1 C.  
08-11-2022 08:00 16.2 C.  
08-11-2022 12:00 16.4 C.  
08-11-2022 16:00 15.9 C.  
08-11-2022 20:00 16.7 C.

### Day 2 in fermentation

09-11-2022 01:00 16.3 C.  
09-11-2022 06:30 16.2 C.  
09-11-2022 08:00 16.2 C.  
09-11-2022 12:00 16.6 C.  
09-11-2022 16:00 16.7 C.  
09-11-2022 19:30 16.7 C.

### Day 3 in fermentation

10-11-2022 00:00 16.1 C.  
10-11-2022 04:00 16.3 C.  
10-11-2022 08:00 16.6 C.  
10-11-2022 12:00 16.8 C.  
10-11-2022 16:00 17.0 C.  
10-11-2022 19:00 16.4 C.  
10-11-2022 22:30 18.5 C.

### Day 4 in fermentation

11-11-2022 00:00 18.6 C.  
11-11-2022 04:00 19.0 C.  
11-11-2022 07:00 18.7 C.  
11-11-2022 14:30 18.7 C.  
11-11-2022 18:00 18.4 C.  
11-11-2022 20:00 19.0 C.

### Day 4 in fermentation

12-11-2022 00:00 18.5 C.  
12-11-2022 04:00 18.2 C.  
12-11-2022 08:00 18.9 C.  
12-11-2022 10:00 18.3 C.  
12-11-2022 12:00 18.3 C.  
12-11-2022 16:00 18.2 C.  
12-11-2022 20:30 19.0 C.

### Day 6 in fermentation

13-11-2022 00:00 18.9 C.  
13-11-2022 04:00 18.3 C.  
13-11-2022 08:00 18.3 C.  
13-11-2022 12:00 19.0 C.  
13-11-2022 16:00 19.0 C.  
13-11-2022 18:00 18.0 C.  
13-11-2022 22:30 18.8 C.

### Day 7 in fermentation

14-11-2022 00:00 18.7 C.  
14-11-2022 04:00 18.2 C.  
14-11-2022 08:00 18.3 C.  
14-11-2022 12:45 18.7 C, roused.

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## Batch Notes

14-11-2022 16:45 18.2 C.  
14-11-2022 20:30 18.1 C.

### Day 8 in fermentation

15-11-2022 02:00 18.3 C.  
15-11-2022 07:30 18.8 C.  
15-11-2022 12:00 18.0 C.  
15-11-2022 16:00 18.3 C.  
15-11-2022 19:00 18.1 C.  
15-11-2022 22:30 18.1 C.

### Day 9 in fermentation

16-11-2022 07:00 18.8 C.  
16-11-2022 12:00 18.8 C.  
16-11-2022 16:00 18.6 C.  
16-11-2022 20:00 18.4 C.

### Day 10 in fermentation

17-11-2022 04:00 18.5 C.  
17-11-2022 07:00 18.2 C.  
17-11-2022 14:00 18.1 C.  
17-11-2022 14:05 added 1.46 grams Progress hop pellets.  
17-11-2022 16:00 20.0 C.  
17-11-2022 20:00 19.7 C.

### Day 11 in fermentation

18-11-2022 00:00 19.4 C.  
18-11-2022 04:00 19.1 C.  
18-11-2022 08:00 19.9 C.  
18-11-2022 12:00 19.9 C.  
18-11-2022 16:00 19.6 C.  
18-11-2022 20:00 19.1 C.

### Day 12 in fermentation

19-11-2022 00:00 19.3 C.  
19-11-2022 04:00 20.0 C.  
19-11-2022 08:00 19.6 C.  
19-11-2022 12:15 19.0 C.  
19-11-2022 16:00 19.3 C.  
19-11-2022 20:00 20.0 C.

### Day 13 in fermentation

20-11-2022 00:00 19.7 C.  
20-11-2022 04:00 19.0 C.  
20-11-2022 08:00 19.2 C.  
20-11-2022 12:00 19.8 C.  
20-11-2022 16:00 19.8 C.  
20-11-2022 20:00 19.3 C.

### Day 14 in fermentation

21-11-2022 00:00 19.1 C.  
21-11-2022 04:00 19.8 C.  
21-11-2022 08:00 20.0 C.  
21-11-2022 12:00 19.1 C.  
21-11-2022 16:00 19.3 C.  
21-11-2022 20:00 20.0 C.

### Day 15 in fermentation

22-11-2022 00:00 19.9 C.  
22-11-2022 04:00 19.0 C.  
22-11-2022 07:30 19.0 C.  
22-11-2022 12:00 20.0 C.  
22-11-2022 16:00 19.6 C.  
22-11-2022 20:00 19.1 C.

### Day 16 in fermentation

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## Batch Notes

23-11-2022 00:30 18.0 C.  
23-11-2022 04:15 18.0 C.  
23-11-2022 07:30 17.7 C.  
23-11-2022 11:45 17.3 C.  
23-11-2022 16:00 17.0 C.  
23-11-2022 19:00 17.5 C.

### Bottling day

23-11-2022 20:51 14.8 C, dp = 0 mm H2O, SG = 1.013, pH = 4.42.  
Filled 2 Steinie bottles (33 cl).

### Day 0 in conditioning

23-11-2022 22:30 17.0 C.

### Day 1 in conditioning in the brew fridge

24-11-2022 00:00 18.9 C.  
24-11-2022 04:00 18.9 C.  
24-11-2022 08:15 18.0 C.  
24-11-2022 12:00 18.2 C.  
24-11-2022 16:00 19.0 C.  
24-11-2022 19:00 19.0 C.

### Day 2 in conditioning

25-11-2022 00:30 18.3 C.  
25-11-2022 07:00 18.5 C.  
25-11-2022 12:00 18.0 C.  
25-11-2022 16:00 18.8 C.  
25-11-2022 18:00 18.4 C.  
25-11-2022 20:30 18.9 C.  
25-11-2022 23:45 18.9 C.

### Day 3 in conditioning

26-11-2022 08:30 19.0 C.  
26-11-2022 10:00 18.0 C.  
26-11-2022 12:00 18.8 C.  
26-11-2022 16:00 18.0 C.  
26-11-2022 20:00 18.9 C.

### Day 4 in conditioning

27-11-2022 00:00 19.0 C.  
27-11-2022 04:00 18.2 C.  
27-11-2022 08:00 18.4 C.  
27-11-2022 12:00 19.0 C.  
27-11-2022 16:00 16.0 C.  
27-11-2022 20:00 17.9 C.

### Day 5 in conditioning

28-11-2022 00:00 19.0 C.  
28-11-2022 04:00 17.8 C.  
28-11-2022 08:00 19.0 C.  
28-11-2022 12:00 17.9 C.  
28-11-2022 16:00 19.0 C.  
28-11-2022 20:00 17.8 C.

### Day 6 in conditioning

29-11-2022 02:45 18.1 C.  
29-11-2022 03:45 17.8 C.  
29-11-2022 08:00 18.8 C.  
29-11-2022 12:00 17.8 C.  
29-11-2022 16:00 18.9 C.  
29-11-2022 20:00 17.8 C.

### Day 7 in conditioning

30-11-2022 00:00 18.6 C.  
30-11-2022 04:00 17.8 C.  
30-11-2022 08:00 18.4 C.

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## Batch Notes

30-11-2022 12:00 18.3 C.  
30-11-2022 16:00 18.2 C.  
30-11-2022 20:00 18.6 C.

### Day 8 in conditioning

01-12-2022 00:00 17.8 C.  
01-12-2022 04:00 19.0 C.  
01-12-2022 08:00 17.8 C.  
01-12-2022 12:00 18.5 C.  
01-12-2022 16:00 18.0 C.  
01-12-2022 20:00 18.1 C.

### Day 9 in conditioning

02-12-2022 00:00 19.0 C.  
02-12-2022 04:00 17.7 C.  
02-12-2022 08:00 18.4 C.  
02-12-2022 12:00 18.8 C.  
02-12-2022 16:00 17.7 C.  
02-12-2022 20:00 18.2 C.

### Day 10 in conditioning

03-12-2022 00:00 18.6 C.  
03-12-2022 04:00 18.8 C.  
03-12-2022 08:00 18.9 C.  
03-12-2022 12:00 17.6 C.  
03-12-2022 16:00 17.6 C.  
03-12-2022 20:00 17.9 C.

### Day 11 in conditioning

04-12-2022 00:00 18.1 C.  
04-12-2022 04:00 18.3 C.  
04-12-2022 08:00 18.3 C.  
04-12-2022 12:00 18.3 C.  
04-12-2022 16:00 18.3 C.  
04-12-2022 20:00 18.3 C.

### Day 12 in conditioning

05-12-2022 00:00 18.3 C.  
05-12-2022 04:00 18.5 C.  
05-12-2022 08:00 18.9 C.  
05-12-2022 12:00 19.3 C.  
05-12-2022 16:00 18.8 C.  
05-12-2022 20:00 18.2 C.

### Day 13 in conditioning

06-12-2022 00:00 18.9 C.  
06-12-2022 04:00 19.6 C.  
06-12-2022 08:00 18.1 C.  
06-12-2022 12:00 18.5 C.  
06-12-2022 16:00 19.3 C.  
06-12-2022 20:00 18.4 C.

### Day 14 in conditioning

07-12-2022 00:00 18.3 C.  
07-12-2022 04:00 19.0 C.  
07-12-2022 08:00 19.3 C.  
07-12-2022 12:00 19.5 C.  
07-12-2022 16:00 18.0 C.  
07-12-2022 20:00 18.5 C.

### Day 15 in conditioning

08-12-2022 00:00 19.0 C.  
08-12-2022 04:00 19.3 C.  
08-12-2022 08:00 18.1 C.  
08-12-2022 12:15 18.2 C.  
08-12-2022 16:15 18.7 C.

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## Batch Notes

08-12-2022 20:00 19.1 C.

Day 16 in conditioning

09-12-2022 00:00 19.1 C.

09-12-2022 04:00 19.1 C.

09-12-2022 08:00 19.1 C.

09-12-2022 12:00 19.1 C.

09-12-2022 16:00 19.1 C.

09-12-2022 20:15 19.0 C.

Day 17 in conditioning

10-12-2022 00:00 18.9 C.

10-12-2022 04:00 18.7 C.

10-12-2022 08:00 18.6 C.

10-12-2022 12:00 18.4 C.

10-12-2022 16:00 18.3 C.

10-12-2022 20:00 18.2 C.

Day 18 in conditioning

11-12-2022 00:00 18.2 C.

11-12-2022 04:00 18.2 C.

11-12-2022 08:00 18.2 C.

11-12-2022 12:00 18.2 C.

11-12-2022 16:00 18.2 C.

11-12-2022 20:00 18.2 C.

Day 19 in conditioning

12-12-2022 00:00 18.3 C.

12-12-2022 04:00 18.3 C.

12-12-2022 08:00 18.3 C.

12-12-2022 12:00 18.3 C.

12-12-2022 16:00 18.3 C.

12-12-2022 20:00 18.1 C.

Day 20 in conditioning

13-12-2022 00:00 17.8 C.

13-12-2022 04:00 17.3 C.

13-12-2022 08:00 16.7 C.

13-12-2022 12:00 16.1 C.

13-12-2022 16:00 16.0 C.

13-12-2022 20:00 15.8 C.

Day 22 in conditioning

15-12-2022 20:48 16.8 C.

Day 25 in conditioning

18-12-2022 14:00 13.7 C.

18-12-2022 22:30 13.6 C.

Day 27 in conditioning

20-12-2022 22:00 14.2 C.

Day 28 in conditioning

21-12-2022 08:00 14.0 C.

21-12-2022 20:30 14.5 C.

Day 29 in conditioning

22-12-2022 08:00 14.5 C.

Day 30 in conditioning

23-12-2022 07:00 14.4 C.

Day 36 in conditioning

29-12-2022 20:00 14.1 C.

Day 37 in conditioning

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## Batch Notes

30-12-2022 00:00 14.1 C.  
30-12-2022 10:00 14.7 C.

Day 38 in conditioning  
31-12-2022 11:00 14.1 C.

Day 39 in conditioning  
01-01-2023 23:00 15.2 C.

Day 40 in conditioning  
02-01-2023 07:30 15.7 C.  
02-01-2023 20:00 15.7 C.

Day 41 in conditioning  
03-01-2023 20:00 15.5 C.

Day 42 in conditioning  
04-01-2023 00:00 15.5 C.  
04-01-2023 07:30 15.4 C.  
04-01-2023 21:00 15.5 C.

## Extra Measured Values

Strike Water Temperature

Strike Water pH

Sparge Water Temperature

Sparge Water pH

Pitch Temperature 18.7

## Batch Log

6 November 2022	Brew Date
7 November 2022 19:30	SV = 17.0 C.
7 November 2022	Fermentation Start
10 November 2022 19:30	SV = 19.0 C.
17 November 2022 14:00	SV = 20.0 C.
22 November 2022 21:25	SV = 18.0 C.
23 November 2022 20:51	Filled 2 Steinie bottles (33 cl).
23 November 2022	Bottling Date
23 November 2022 22:35	SV = 19.0 C.
4 December 2022 17:20	SV = 19.5 C.
13 December 2022 20:30	Bottles from the brew shed to indoors.
4 January 2023 23:00	Status: Completed

## Taste

3.2 / 5.0