

Porter



A little history

- * About 300 years of Porter brewing
- * Evolved from Brown ales using Brown malt
- * Was aged at the brewery
- * First industrially produced beer

Applied Science



1814 Porter Flood



Enough history,
what is it supposed
to taste like and
how can I make
some?

BJCP guidelines say:

- * 12 B: Robust Porter
- * Overall impression: A substantial, malty dark ale with a complex and flavorful roasty character.
- * I'll add: some hop finish is nice too.

Two Commercial Recipes

Brew Number
Brew I.D. Fall Porter

Date

Malts	Lbs.	Salts	Oz.
Pilsner	660	CaCl2	16
Crystal 50-60	55	in kettle	
Brown	28		
Carafa II Special	5	All dark malts at ramp to 170.	
Roasted Barley	5		
Chocolate malt	15		
Caramunich II	7		
Total Pounds:	775		

Mash Profile	Time	Water Gals.	°F
131 for 15'		275	132
148 for 45'		50	170
158 for 15'			
170 for 5'		<i>Water/Grist Ratio:</i>	
pump over 10'		3 to 1	

Hops 60 IBU	% Alpha	Time	
GNB 3 lbs	9.4		60
Cascade 5 lbs.	7.4		20
Brewbrite 8 oz./Yeastex 4 oz.			15
			5
English Fuggle 11 lbs.	4.4		WP

Knockout Volume: °P 64°F FV
Target Gravity: 17.0 °P pH

Brew Number
Brew I.D. Winter Porter

Date

Malts	Lbs.	Salts	Oz.
Pilsner malt	853	CaCl2	16
Crystal 50-60	55	in kettle	
Chocolate malt	55		
Roasted Barley	15	Corn sugar	60lbs.
Carafa III Special	15	Add dark malts at end.	
Total Pounds:	993		

Mash Profile	Time	Water Gals.	°F
131 for 15		285	132
144 for 45		30	170
158 for 30			
170 for 5		<i>Water/Grist Ratio:</i>	
pump over 10		2.42 to 1	
Hops 75 IBU	% Alpha	Time	
CTZ 3 lbs 5 oz.	18.4		60
Yeastex 4 oz./ sugar 60#			30
Brewbrite 10 oz.			15
Fuggle 11#	4.4		5
			WP

Knockout Volume: °P 64°F FV
Target Gravity: 22°P pH

Porter, by Terry Foster

Porter

REDCOAT'S REVENGE PORTER

Length	5 gallons (Grain)	5 gallons (Extract)	1 barrel (Grain)
Pale malt:	8.6 lb (3.9 kg)	1.5 lb (0.7 kg)	46.6 lb (21.2 kg) 81.5%
Crystal malt:	1 lb (0.45 kg)	1 lb (0.45 kg)	6.3 lb (2.9 kg) 11%
Pale malt syrup:	_____	6 lb (2.7 kg)	_____
Chocolate malt:	0.5 lb (227 g)	0.5 lb (227 g)	3.2 lb (1.5 kg) 5.8%
Black malt:	2 oz (57 g)	2 oz (57 g)	0.8 lb (0.4 kg) 1.5%
Bittering hops			
Clusters (7% alpha)	1.7 oz (48 g)	1.7 oz (48 g)	9 oz (256 g)
HBU:	11.9	11.9	63
IBU:	45	45	45
Aroma hops			
Cascade (10 minutes):	0.4 oz (11 g)	0.4 oz (11 g)	2.5 oz (71 g)
Talisman (end):	0.5 oz (14 g)	0.5 oz (14 g)	3 oz (85 g)
Color (°L)	70	70	70
Mash temperature:	150 to 152 degrees F (65.5 to 66.5 degrees C)		
Original Gravity:	1.060 (14.7 °Plato)		
Finishing Gravity:	1.012 to 1.016 (3.0 to 4.0 °Plato)		
Priming sugar:	4 oz (114 g) cane sugar, as syrup, in 5 gallons		
CO ₂ (volumes):	2 to 2 1/0		
Packaging:	In bottle		
Maturation time:	2 to 6 months		

Some good commercial examples



A couple more...



And two more.



Thanks!



MARKET
GARDEN
B R E W E R Y