

BREWSHEET v2.1 (2011-01-04)

Batch			
Brew Name:	Noble Doormat (Saaz)		
Bottle Top Code:	Calories per Pint:		152
Estimated OG:	1.045	Actual OG:	1.045
Estimated FG:	1.009	Actual FG:	1.016
Estimated IBU:	35	Actual IBU:	35
Estimated SRM:		Actual SRM:	6
Brew Date:	03/01/11	Collected (gal):	5.50
Rack Date:	04/09/11	Racked (gal):	5.00
Bottle Date:	04/09/11	Bottled (gal):	5.00

BJCP Style Guidelines	
Style:	American Pale Ale
Code:	10A
OG:	1.045-1.060
FG:	1.010-1.015
IBU:	30.0-45.0
SRM:	5.0-14.0
ABV:	4.5-6.0%
CO2:	2.2-2.7

Inventory	
Bottles:	
Gallons:	
Date Checked:	

Efficiency	
Brewhouse:	70%
Batch Size:	70%
Into Boiler:	87%
Into Fermenter:	70%

Yeast Strain	
Yeast Strain:	Danstar Nottingham (Dry Ale)
Type:	Dry Ale
Attenuation (%):	75-85%
Actual Attenuation (%):	66%
Fermentation Temp (F):	57-70F
Flocculation:	high

Yeast Amounts	
Cell Count (billions):	175
Vials (White Labs/Wyeast):	1.5
Dry Yeast (g):	9
Starter Volume (mL):	0
DME Required (oz)	
Vials Required (w/ Starter):	

ON BREW DAY	
Heat 3.09 gallons of strike water to 168F	
Add grain and mash at 152F for 60 minutes	
Mash-out with 1.61 gallons at 210F, mix and hold for 10 minutes	
Vorlauf and collect first runnings (approx. 3.21 gallons)	
Add 5.58 gallons at 178F to lautur tun and sparge	
Vorlauf and collect second runnings (approx. 5.58 gallons)	
Boil for a total of 90 minutes with the following hop schedule:	
1.125 oz. Saaz (CZ) @60 minute(s)	
1.125 oz. Saaz (CZ) @24 minute(s)	
1.125 oz. Saaz (CZ) @16 minute(s)	
1.125 oz. Saaz (CZ) @5 minute(s)	

Summary	
Noble Doormat (Saaz)	
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Batch Size: 5.50 gal (8.80 gal preboil)	
Estimated OG: 1.045 SG (actual: 1.045 SG)	
Estimated FG: 1.009 SG (actual: 1.016 SG)	
Estimated IBUs: 35 (Finseth; actual: 35)	
Estimated Color: 6 SRM (actual: 6 SRM)	
Brewhouse Efficiency: 70% (actual: 70%)	
Boil Time: 90 minutes	
Grains:	
7.25# Pale Malt (2-Row) US (2.0L) (73.42%)	
2.13# Vienna Malt (3.5L) (21.52%)	
0.50# British carastan (34.0L) (5.06%)	

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	7.25	1.036	0.033	2.0	73.42%
Vienna Malt	2.13	1.036	0.010	3.5	21.52%
British carastan	0.50	1.035	0.002	34.0	5.06%

Brewing		
Batch Size (gal):	5.50	Estimated First Runnings (gal): 3.21
Total Grain Weight (lbs):	9.88	Desired Sparge Temperature (F): 170
Grain Temperature (F):	72	Sparge Water (gal): 5.58
Mash Ratio (qts/lb):	1.25	Sparge Water Temperature (F): 178
Mash/Lauter Deadspace (gal):	0.25	Estimated Preboil Volume (gal): 8.80
Total Water Needed (gal):	10.28	Boil Time (min): 90
Desired Mash Temperature (F):	152	Evaporation Rate (gal/hr): 1.70
Strike Water (gal):	3.09	Estimated Evaporation Loss (gal): 2.55
Strike Temperature (F):	168	Trub Loss (gal): 0.75
Grain Absorption (gal):	1.23	Volume Left in Kettle (gal): 0.00
Mash-out Temperature (F):	152	Actual Evaporation Rate (gal/hr): 1.71
Mash-out Water (gal):	1.61	Actual Evaporation Loss (gal): 2.55

Hop	Alpha %	Ounces	Boil Time	IBU	% Bill
Saaz (CZ)	3.9%	1.13	60	14.4	25.00%
Saaz (CZ)	3.9%	1.13	24	9.8	25.00%
Saaz (CZ)	3.9%	1.13	16	7.5	25.00%
Saaz (CZ)	3.9%	1.13	5	2.9	25.00%

Gravity		Collections	
Potential OG:	1.065	First Runnings (gal):	4.55
OG:	1.045	SG of First Runnings:	1.056
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.045	Corrected SG:	1.056
SG at Racking:		Second Runnings (gal):	4.25
SG Temperature (F):		SG of Second Runnings:	1.016
Corrected SG:		SG Temperature (F):	60
FG:	1.016	Corrected SG:	1.016
FG Temperature (F):	51	Estimated Preboil SG:	1.037
Corrected FG:	1.016	Preboil Volume (gal):	8.80
Potential ABV (%):	5.9%	SG of Preboil Volume:	1.035
Actual ABV (%):	3.9%	SG Temperature (F):	60
IBU to Gravity Ratio:	0.76	Corrected SG:	1.035

Diacetyl Rest		Carbonation	
Target Fermentation Completion:		CO2 Volume:	2.45
Target SG for Diacetyl Rest:		Bottling Temperature (F):	
		Priming Sugar (oz):	
		DME (oz):	
Fermentation		Forced Carbonation (lbs):	
CO2 Released During Fermentation (g):	609.36		

Notes	
Experiment to see how noble hops change the beer (1 <sup>st</sup> of 5 brews). Equal additions for a total of ~35 IBUs. Pitch the yeast dry (no hydration). 3/1: for more even collections, mashout was 2.65 and sparge was 4.54. Mashout steeped for 10 mins and sparge steeped for 20 mins. Missed the 30 min by 6 mins (too busy I guess). 4/4: crash cool	

User Variables	
12 oz. Bottles Required:	51
Primary Fermentation Temp. (F):	66
Secondary Fermentation Temp (F):	71
FNH IBU Factor (%):	10%
Strike Temperature Factor (F):	3
Sparge Temperature Factor (F):	2
Mash Time (min):	60
Specific Gravity (Brix):	11.6
Specific Gravity (SG):	1.045

Yeast:	
Danstar Nottingham (Dry Ale)	
Mash/Sparge Schedule:	
Single Infusion, 152F; Batch Sparge	
Mash for 60 min at 152F w/ 3.09 gal of water at 168F	
Mashout w/ 1.61 gal of water at 210F; hold for 10 min	
Batch sparge w/ 5.58 gal of water at 178F; hold for 10 min	
Fermentation Schedule:	
Primary Fermentation: 39 days @66F	
Secondary Fermentation: 0 days @71F	