

BREWSHEET v2.1 (2011-01-04)

Batch			
Brew Name:	Noble Doormat (Hersbrucker)		
Bottle Top Code:	Calories per Pint:		1.040
Estimated OG:	1.045	Actual OG:	
Estimated FG:	1.009	Actual FG:	35
Estimated IBU:	35	Actual IBU:	6
Estimated SRM:		Actual SRM:	5.50
Brew Date:	04/23/11	Collected (gal):	
Rack Date:		Racked (gal):	
Bottle Date:		Bottled (gal):	

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:	62%
Into Boiler:	80%
Into Fermenter:	65%

Yeast Strain	
Yeast Strain:	Danstar Nottingham (Dry Ale)
Type:	Dry Ale
Attenuation (%):	75-85%
Actual Attenuation (%):	
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 163F	
Add grain and mash at 149F for 60 minutes	
Mash-out with 1.88 gallons at 210F, mix and hold for 10 minutes	
Vorlauf and collect first runnings (approx. 3.48 gallons)	
Add 5.34 gallons at 179F to lautur tun and sparge	
Vorlauf and collect second runnings (approx. 5.34 gallons)	
Boil for a total of 90 minutes with the following hop schedule:	
1.8 oz. Hersbrucker @60 minute(s)	
1.8 oz. Hersbrucker @24 minute(s)	
1.8 oz. Hersbrucker @16 minute(s)	
1.8 oz. Hersbrucker @5 minute(s)	

Summary	
<b>Noble Doormat (Hersbrucker)</b>	
Batch Size: 5.50 gal (8.82 gal preboil)	
Estimated OG: 1.045 SG (actual: 1.040 SG)	
Estimated FG: 1.009 SG	
Estimated IBU: 35 (finseth; actual: 35)	
Estimated Color: 6 SRM (actual: 6 SRM)	
Brewhouse Efficiency: 70% (actual: 62%)	
Boil Time: 90 minutes	
<b>Grains:</b>	
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
Total Grain Weight (lbs):	9.88
Grain Temperature (F):	80
Mash Ratio (qts/lb):	1.25
Mash/Lauter Deadspace (gal):	0.25
Total Water Needed (gal):	10.30
Desired Mash Temperature (F):	149
Strike Water (gal):	3.09
Strike Temperature (F):	163
Grain Absorption (gal):	1.23
Mash-out Temperature (F):	149
Mash-out Water (gal):	1.88
Estimated First Runnings (gal):	3.48
Desired Sparge Temperature (F):	170
Sparge Water (gal):	5.34
Sparge Water Temperature (F):	179
Estimated Preboil Volume (gal):	8.82
Boil Time (min):	90
Evaporation Rate (gal/hr):	1.71
Estimated Evaporation Loss (gal):	2.57
Trub Loss (gal):	0.75
Volume Left in Kettle (gal):	0.25
Actual Evaporation Rate (gal/hr):	1.71
Actual Evaporation Loss (gal):	2.55

Hop	Alpha %	Ounces	Boil Time	IBU	% Bill
Hersbrucker	2.5%	1.80	60	14.8	25.00%
Hersbrucker	2.5%	1.80	24	10.0	25.00%
Hersbrucker	2.5%	1.80	16	7.7	25.00%
Hersbrucker	2.5%	1.80	5	2.9	25.00%

Gravity		Collections	
Potential OG:	1.065	First Runnings (gal):	4.60
OG:	1.040	SG of First Runnings:	1.045
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.040	Corrected SG:	1.045
SG at Racking:		Second Runnings (gal):	4.45
SG Temperature (F):		SG of Second Runnings:	1.012
Corrected SG:		SG Temperature (F):	60
FG:		Corrected SG:	1.012
FG Temperature (F):		Estimated Preboil SG:	1.029
Corrected FG:		Preboil Volume (gal):	9.05
Potential ABV (%):	5.9%	SG of Preboil Volume:	1.031
Actual ABV (%):		SG Temperature (F):	60
IBU to Gravity Ratio:	0.88	Corrected SG:	1.031

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

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). 4/23: 80 min mash (low temp); mashout 2.75 gals; sparge 4.5 gals.	

User Variables	
12 oz. Bottles Required:	
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):	10.4
Specific Gravity (SG):	1.040

Yeast:	
Danstar Nottingham (Dry Ale)	
<b>Mash/Sparge Schedule:</b>	
Single Infusion, 149F; Batch Sparge	
Mash for 60 min at 149F w/ 3.09 gal of water at 163F	
Mashout w/ 1.88 gal of water at 210F; hold for 10 min	
Batch sparge w/ 5.34 gal of water at 179F; hold for 10 min	
<b>Fermentation Schedule:</b>	