

BREWSHEET v2.1 (2011-01-04)

Batch			
Brew Name:	Soul Stripper IPA v2		
Bottle Top Code:	Calories per Pint:	227	
Estimated OG:	1.068	Actual OG:	1.068
Estimated FG:	1.017	Actual FG:	1.018
Estimated IBU:	71	Actual IBU:	79
Estimated SRM:		Actual SRM:	8
Brew Date:	01/07/11	Collected (gal):	5.40
Rack Date:	01/22/11	Racked (gal):	5.40
Bottle Date:	02/02/11	Bottled (gal):	4.25

BJCP Style Guidelines	
Style:	American IPA
Code:	14B
OG:	1.056-1.075
FG:	1.010-1.018
IBU:	40.0-70.0
SRM:	6.0-15.0
ABV:	5.5-7.5%
CO2:	1.5-2.3

Inventory	
Bottles:	
Gallons:	
Date Checked:	

Efficiency	
Brewhouse:	73%
Batch Size:	73%
Into Boiler:	87%
Into Fermenter:	66%

Yeast Strain	
Yeast Strain:	White Labs WLP007 (English Ale)
Type:	English Ale
Attenuation (%):	70-80%
Actual Attenuation (%):	73%
Fermentation Temp (F):	65-70F
Flocculation:	medium-high

Yeast Amounts	
Cell Count (billions):	281
Vials (White Labs/Wyeast):	2.4
Dry Yeast (g):	14
Starter Volume (mL):	3500
DME Required (oz):	12.25
Vials Required (w/ Starter):	1.0

ON BREW DAY	
Heat 4.84 gallons of strike water to 170F	
Add grain and mash at 152F for 60 minutes	
Mash-out with 2.53 gallons at 210F, mix and hold for 10 minutes	
Vorlauf and collect first runnings (approx. 5.18 gallons)	
Add 4.77 gallons at 183F to lautur tun and sparge	
Vorlauf and collect second runnings (approx. 4.77 gallons)	
Boil for a total of 110 minutes with the following hop schedule:	
1.25 oz. Centennial @110 minute(s)	
1.25 oz. Cascade @50 minute(s)	
0.75 oz. Centennial @50 minute(s)	
1.25 oz. Cascade @5 minute(s)	
1.25 oz. Columbus @5 minute(s)	
2 oz. Cascade @0 minute(s)	
1 oz. Columbus @0 minute(s)	

Summary	
Soul Stripper IPA v2	

Batch Size:	6.00 gal (9.96 gal preboil)
Estimated OG:	1.068 SG (actual: 1.068 SG)
Estimated FG:	1.017 SG (actual: 1.018 SG)
Estimated IBUs:	71 (Tinseth; actual: 79)
Estimated Color:	8 SRM (actual: 9 SRM)
Brewhouse Efficiency:	73% (actual: 73%)
Boil Time:	110 minutes

Grain	Pounds	Potential	SG Share	Color	% Bill
Northwestern Pale Ale malt	13.50	1.036	0.059	2.8	87.10%
British carastan	1.00	1.035	0.004	34.0	6.45%
Red Wheat	1.00	1.039	0.005	1.5	6.45%

Brewing	
Batch Size (gal):	6.00
Total Grain Weight (lbs):	15.50
Grain Temperature (F):	68
Mash Ratio (qts/lb):	1.25
Mash/Lauter Deadspace (gal):	0.25
Total Water Needed (gal):	12.15
Desired Mash Temperature (F):	152
Strike Water (gal):	4.84
Strike Temperature (F):	170
Grain Absorption (gal):	1.94
Mash-out Temperature (F):	152
Mash-out Water (gal):	2.53
Estimated First Runnings (gal):	5.18
Desired Sparge Temperature (F):	170
Sparge Water (gal):	4.77
Sparge Water Temperature (F):	183
Estimated Preboil Volume (gal):	9.96
Boil Time (min):	110
Evaporation Rate (gal/hr):	1.75
Estimated Evaporation Loss (gal):	3.21
Trub Loss (gal):	0.75
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	2.02
Actual Evaporation Loss (gal):	3.70

Hop	Alpha %	Ounces	Boil Time	IBU	% Bill
Centennial	9.1%	1.25	110	30.3	8.93%
Cascade	4.6%	1.25	50	13.4	8.93%
Centennial	9.1%	0.75	50	15.9	5.36%
Cascade	4.6%	1.25	5	2.8	8.93%
Columbus	14.5%	1.25	5	8.9	8.93%
Cascade	4.6%	2.00	0	0.0	14.29%
Columbus	14.5%	1.00	0	0.0	7.14%
Cascade	4.6%	2.75	dry	0.0	19.64%
Columbus	14.5%	1.50	dry	0.0	10.71%
Amarillo	8.6%	1.00	dry	0.0	7.14%

Gravity		Collections	
Potential OG:	1.093	First Runnings (gal):	5.65
OG:	1.068	SG of First Runnings:	1.076
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.068	Corrected SG:	1.076
SG at Racking:	1.020	Second Runnings (gal):	4.20
SG Temperature (F):	66	SG of Second Runnings:	1.028
Corrected SG:	1.021	SG Temperature (F):	60
FG:	1.018	Corrected SG:	1.028
FG Temperature (F):	48	Estimated Preboil SG:	1.056
Corrected FG:	1.018	Preboil Volume (gal):	9.85
Potential ABV (%):	8.9%	SG of Preboil Volume:	1.049
Actual ABV (%):	6.5%	SG Temperature (F):	60
IBU to Gravity Ratio:	1.16	Corrected SG:	1.049

Diacetyl Rest		Carbonation	
Target Fermentation Completion:		CO2 Volume:	1.90
Target SG for Diacetyl Rest:		Bottling Temperature (F):	
		Priming Sugar (oz):	
		DME (oz):	
		Forced Carbonation (lbs):	

Notes	
Bulk grain buy included carastan (30-37L) so I decided to use it instead of C60.	
Same with NW Pale Ale malt; slightly more malty which will be nice.	
Mashed for 85 mins.	
Collected a bit more from the sparge.	
Took gravity during the boil and increased it from 90 to 110 to get nearer target OG.	
Turns out that shrinkage from cooling adds almost 5 points!	
Next time maybe add more boil off instead of increasing batch size for increase in hops.	
1/22: great flavor and bitterness.	
Washed yeast for future use.	
2/2: wonderful aroma and flavor backed by a good bitterness.	

User Variables	
12 oz. Bottles Required:	44
Primary Fermentation Temp. (F):	66
Secondary Fermentation Temp (F):	71
FWH IBU Factor (%):	10%
Strike Temperature Factor (F):	5
Sparge Temperature Factor (F):	3
Specific Gravity (P):	16.6
Specific Gravity (SG):	1.068

Grains:	
13.50# Northwestern Pale Ale malt (2.8L) (87.10%)	
1.00# British carastan (34.0L) (6.45%)	
1.00# Red Wheat (1.5L) (6.45%)	

Hops:	
1.25 oz Centennial (9.1%) @110 min	
1.25 oz Cascade (4.6%) @50 min	
0.75 oz Centennial (9.1%) @50 min	
1.25 oz Cascade (4.6%) @5 min	
1.25 oz Columbus (14.5%) @5 min	
2.00 oz Cascade (4.6%) @0 min	
1.00 oz Columbus (14.5%) @0 min	
2.75 oz Cascade (4.6%) (dry hop)	
1.50 oz Columbus (14.5%) (dry hop)	
1.00 oz Amarillo (8.6%) (dry hop)	

Yeast:	
White Labs WLP007 (English Ale)	

Mash/Sparge Schedule:	
Single Infusion, 152F; Batch Sparge	
Mash for 60 min at 152F w/ 4.84 gal of water at 170F	
Mashout w/ 2.53 gal of water at 210F; hold for 10 min	
Batch sparge w/ 4.77 gal of water at 183F; hold for 10 min	

Fermentation Schedule:	
Primary Fermentation: 15 days @66F	
Secondary Fermentation: 11 days @71F	