

BREWSHEET v2.0 (2010-06-17)

Batch			
Brew Name:	A Right Scunner Scottish Ale		
Bottle Top Code:	Calories per Pint:		188
Estimated OG:	1.055	Actual OG:	1.055
Estimated FG:	1.015	Actual FG:	1.024
Estimated IBU:	26	Actual IBU:	26
Estimated SRM:	13	Actual SRM:	13
Brew Date:	12/21/10	Collected (gal):	5.50
Rack Date:	01/17/11	Racked (gal):	5.20
Bottle Date:	02/07/11	Bottled (gal):	5.00

BJCP Style Guidelines	
Style:	Scottish Export 80/-
Code:	9C
OG:	1.040-1.054
FG:	1.010-1.016
IBU:	15.0-30.0
SRM:	9.0-17.0
ABV:	3.9-5.0%
CO2:	0.8-1.3

Inventory	
Bottles:	
Gallons:	
Date Checked:	

Efficiency	
Brewhouse:	73%
Batch Size:	73%
Into Boiler:	90%
Into Fermenter:	73%

Yeast Strain	
Yeast Strain:	White Labs WLP028 (Edinburgh Scottish Ale)
Type:	Edinburgh Scottish Ale
Attenuation (%):	70-75%
Actual Attenuation (%):	57%
Fermentation Temp (F):	65-70F
Flocculation:	medium

Summary	
A Right Scunner Scottish Ale	

Batch Size:	5.50 gal (8.93 gal preboil)
Estimated OG:	1.055 SG (actual: 1.055 SG)
Estimated FG:	1.015 SG (actual: 1.024 SG)
Estimated IBUs:	26 (Tinseth; actual: 26)
Estimated Color:	13 SRM (actual: 13 SRM)
Brewhouse Efficiency:	73% (actual: 73%)
Boil Time:	90 minutes

Grain	Pounds	Potential	SG Share	Color	% Bill
Golden Promise Malt	8.50	1.038	0.043	3.0	77.27%
Home Toasted Golden Promise	1.00	1.038	0.005	30.0	9.09%
Caramel/Crystal 60L	1.00	1.034	0.005	60.0	9.09%
Belgian aromatic malt	0.31	1.036	0.001	26.0	2.84%
Peated malt	0.19	1.038	0.001	5.0	1.70%

Brewing			
Batch Size (gal):	5.50	Estimated First Runnings (gal):	3.31
Total Grain Weight (lbs):	11.00	Desired Sparge Temperature (F):	170
Grain Temperature (F):	73	Sparge Water (gal):	5.62
Mash Ratio (qts/lb):	1.25	Sparge Water Temperature (F):	177
Mash/Lauter Deadspace (gal):	0.25	Estimated Preboil Volume (gal):	8.93
Total Water Needed (gal):	10.55	Boil Time (min):	90
Desired Mash Temperature (F):	155	Evaporation Rate (%):	20%
Strike Water (gal):	3.44	Estimated Evaporation Loss (gal):	2.68
Strike Temperature (F):	171	Trub Loss (gal):	0.75
Grain Absorption (gal):	1.38	Volume Left in Kettle (gal):	0.00
Mash-out Temperature (F):	155	Actual Evaporation Rate (%):	20%
Mash-out Water (gal):	1.50	Actual Evaporation Loss (gal):	2.75

Gravity		Collections	
Potential OG:	1.075	First Runnings (gal):	3.50
OG:	1.055	SG of First Runnings:	1.068
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.055	Corrected SG:	1.068
SG at Racking:	1.025	Second Runnings (gal):	5.50
SG Temperature (F):	60	SG of Second Runnings:	1.021
Corrected SG:	1.025	SG Temperature (F):	60
FG:	1.024	Corrected SG:	1.021
FG Temperature (F):	52	Estimated Preboil SG:	1.039
Corrected FG:	1.024	Preboil Volume (gal):	9.00
Potential ABV (%):	7.2%	SG of Preboil Volume:	1.041
Actual ABV (%):	4.1%	SG Temperature (F):	60
IBU to Gravity Ratio:	0.48	Corrected SG:	1.041

Diacetyl Rest		Carbonation	
Target Fermentation Completion:	75%	CO2 Volume:	1.05
Target SG for Diacetyl Rest:	1.025	Bottling Temperature (F):	
		Priming Sugar (oz):	
		DME (oz):	
		Forced Carbonation (lbs):	

Notes

"A Right Scunner" == "Irritating"
 Toast 1 lb. Golden Promise for about an hour at 350F.
 Boil about 2 qt of first runnings and reduce to 1 qt; add with 5 mins left in boil.
 Ferment at 60F for 3 to 4 weeks
 Condition in secondary (keg) at 70F for 2 to 3 weeks
 First time using only the refractometer (no hydrometer) during brew.
 1/4/11: 1.025 SG; still a bit sweet and very cloudy but good malty notes and slight bitterness.
 2/3/11: clearing in the secondary; will cold crash soon and sample before.
 2/7: aroma and flavor very close to Belhaven Scottish Ale! Yay!
 This is perhaps one of the best beers I've brewed.

No noticeable peat, but that might increase with time.
 I may increase the peated malt next time to maybe 3%?

Yeast Amounts	
Cell Count (billions):	210
Vials (White Labs/Wyeast):	1.8
Dry Yeast (g):	11
Starter Volume (mL):	2500
DME Required (oz):	8.75
Vials Required (w/ Starter):	1.0

ON BREW DAY

Heat 3.44 gallons of strike water to 171F
 Add grain and mash at 155F for 60 minutes
 Mash-out with 1.5 gallons at 210F, mix and hold for 10 minutes
 Vorlauf and collect first runnings (approx. 3.31 gallons)
 Add 5.62 gallons at 177F to lautur tun and sparge
 Vorlauf and collect second runnings (approx. 5.62 gallons)
 Boil for a total of 90 minutes with the following hop schedule:
 1.75 oz. Kent Golding @60 minute(s)

Grains:

8.50# Golden Promise Malt (77.27%)
 1.00# Home Toasted Golden Promise (9.09%)
 1.00# Caramel/Crystal 60L (9.09%)
 0.31# Belgian aromatic malt (2.84%)
 0.19# Peated malt (1.70%)

Hops:

1.75 oz Kent Golding (5.0%) @60 min

Extra Variables	
12 oz. Bottles Required:	51
Primary Fermentation Temp. (F):	60
Secondary Fermentation Temp. (F):	70

Yeast:

White Labs WLP028 (Edinburgh Scottish Ale)

Mash/Sparge Schedule:

Single Infusion, 155F; Batch Sparge
 Mash for 60 min at 155F w/ 3.44 gal of water at 171F
 Mashout w/ 1.50 gal of water at 210F; hold for 10 min
 Batch sparge w/ 5.62 gal of water at 177F; hold for 10 min

Fermentation Schedule:

Primary Fermentation: 27 days @60F
 Secondary Fermentation: 21 days @70F