BREWSHEET v3.3 (2012-03-18)

user input
calculated

Brew			
Name:	Maple Nut Brown Ale		
Brew Date:	2013 October 20	Collected (gal):	10.25
Rack Date:		Racked (gal):	
Keg/Bottle Date:	2013 November 3	Kegged/Bottled (gal):	10.00
Estimated		**Actual**	
ABV (%):	5.0%	ABV (%):	4.9%
OG (SG):	1.055	OG (SG):	1.053
FG (SG):	1.017	FG (SG):	1.016
IBU:	26.1	IBU:	26.0
SRM:	27.0	SRM:	26.6
IBU/Gravity Ratio:	0.47	IBU/Gravity Ratio:	0.49

Grain	Pounds	Potential	SG Share	Color	% Bill
Golden Promise Malt	12.46	1.038	0.033	3.0	56.13%
Belgian Special "B"	1.42	1.030	0.003	220.0	6.40%
British carastan	1.42	1.035	0.003	34.0	6.40%
Belgian aromatic malt	1.32	1.036	0.003	26.0	5.95%
Chocolate Malt	0.38	1.028	0.001	350.0	1.71%
Flaked oats	2.00	1.033	0.005	2.2	9.01%
Maple syrup	3.20	1.030	0.007	35.0	14.41%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Cascade	L	1.50	75	8.8%	19.8	60.00%
Cascade	L	1.00	15	8.8%	6.3	40.00%

Design Notes

Batch Variables and Calculations	
Batch Size (gal):	10.00
Grain Temperature (F):	71
Total Grain Weight (lbs):	22.20
Mash	
Mash Time (min):	60
Desired Mash Temperature (F):	158
Strike Water (gal):	9.66
Strike Temperature (F):	175
Mash Ratio (qts/lb):	1.74
Grain Absorption (gal):	2.78
Mash Volume (gal):	11.44
Mash-out Temperature (F):	170
Estimated First Runnings (gal):	6.74
First Runnings (gal):	6.85
First Runnings Gravity (Brix):	14.55
First Runnings Gravity (SG):	1.056
Sparge	
Desired Sparge Temperature (F):	170
Sparge Water (gal):	6.28
Sparge Water Temperature (F):	174
Estimated Second Runnings (gal):	6.75
Second Runnings (gal):	6.15
Second Runnings Gravity (Brix):	5.05
Second Runnings Gravity (SG):	1.020
Estimated Preboil Volume (gal):	13.49
Estimated Preboil Gravity (Brix):	10.06
Preboil Volume (gal):	13.00
Preboil Gravity (Brix):	9.45
Preboil Gravity (SG):	1.037
Extraction Efficiency (%):	61%
Boil	
Boil Time (min):	105
Estimated Evaporation Loss (gal):	2.24
Hop Absorption (gal):	0.25
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	0.85
Actual Evaporation Loss (gal):	1.49
Original Gravity (Brix):	13.65
Batch Size Efficiency (%):	67%
Actual Efficiency (%):	69%
Fermentation	
Primary Fermentation (days):	14
Primary Fermentation Temperature (F):	62
Gravity After Primary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Secondary Fermentation (days):	3
Secondary Fermentation Temperature (F):	32
Gravity After Secondary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Tertiary Fermentation (days):	
Tertiary Fermentation Temperature (F):	
Final Gravity (SG):	1.018
Temperature of Reading (F):	39
Corrected SG:	1.016
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	177
12 oz. Bottles Required:	102
Carbonation	
Bottling Temperature (F):	
Volumes of CO2:	2.00
Priming Sugar (oz):	
DME (oz):	
Forced Carbonation (lbs):	

System Variables	
Brewhouse Efficiency (%):	70%
Volume in Hoses (gal):	0.22
Volume in Wort Chiller (gal):	0.19
Volume in HERMS Coil (gal):	0.25
Mash/Lauter Tun Deadspace (gal):	0.14
Strike to Sparge Volume Ratio (%):	50%
Trub Loss (gal):	0.16
FWH IBU Factor (%):	10%
Strike Temperature Factor (F):	7
Sparge Temperature Factor (F):	4
Estimated Evaporation Rate (gal/hr):	1.28
Leaf Hop Absorption Ratio (qts/oz):	0.40
Pellet Hop Absorption Ratio (qts/ oz):	0.10
Cooling Losses (%):	4%
Hydrometer Correction (SG):	-0.001

BJCP Style Guidelines	
Style:	American Brown Ale
Code:	10C
OG:	1.045-1.060
FG:	1.010-1.016
IBU:	20.0-40.0
SRM:	18.0-35.0
ABV:	4.3-6.2%
CO2:	1.5-2.5

Yeast Strain	
Yeast Strain:	Danstar Windsor (Dry Ale)
Type:	Dry Ale
Attenuation (%):	67-72%
Actual Attenuation (%):	71%
Fermentation Temp (F):	64-70F
Flocculation:	medium

Required Amounts	
Cell Count (billions):	383
Vials (White Labs/Wyeast):	
Dry Yeast (g):	19.2
Yeast Starter/Slurry	
Vials (White Labs/Wyeast):	
Date Yeast Produced:	
Yeast Viability (%):	
Yeast Growth Rate:	
Yeast Innoculation Rate (million/ml):	
Starter Volume Required (ml);	
DME Required (oz):	
Yeast slurry concentration (billion/ml):	2.5
Non-yeast Percentage (%):	20%
Yeast Slurry Required (ml):	

User Variables	

Batch Scaling				
Desired OG:	1.048	Total Weight (lbs):		18.87
Batch Size (gal):	10.00	Total Bill:		100.00%
Brewhouse Efficiency (%):	70%			
Grain	**Pounds**	**Potential**	**Color**	**% Bill**
Golden Promise Malt	12.46	1.038	3.0	66.00%
Belgian Special "B"	1.42	1.030	220.0	7.50%
British carastan	1.42	1.035	34.0	7.50%
Belgian aromatic malt	1.32	1.036	26.0	7.00%
Chocolate Malt	0.38	1.028	350.0	2.00%
Flaked oats	1.89	1.033	2.2	10.00%

Poundage		
Goal (lbs):	12.46	
Amount (lbs | oz.f_oz):	2	10.12
Amount (lbs | oz.f_oz):	2	12.41
Amount (lbs | oz.f_oz):	2	7.22
Amount (lbs | oz.f_oz):	2	8.67
Amount (lbs | oz.f_oz):	1	15.53
Amount (lbs | oz.f_oz):		1.41
Amount (lbs | oz.f_oz):		
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Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Needed (lbs | oz.f_oz):	0	0.00

Hydrometer Correction		
SG:	1.053	
Temperature (F):	68	
Corrected SG:	1.053	

Gravity Calculator			
Brix:	11.30	13.65	
Specific Gravity:	1.044	1.053	
Degrees Plato:	10.88	13.03	

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes

10/20: increased boil by 15 min; 60 min hops now 75 min hops.
Added maple syrup with ~10 mins left in boil.
Great maple aroma; with the high mash temp, hopefully it'll stay in there.
With the heavy flaked oats, hopefully it will be "chewy."
11/3: kegged.
Finished a bit higher than I expected (maybe the warmer temps during the last week of fermentation?)
1st batch: 1.015 FG; nice brown color; aroma is malty, maple syrup, bready; flavor is malt and maple syrup! a tad more bitter than I anticipated, but not too overpowering.
2nd batch: 1.017 SG; aroma similar to first but perhaps a bit less maple; flavor also similar to first but bitterness is maybe a but more pronounced (or maybe comes in a bit earlier)