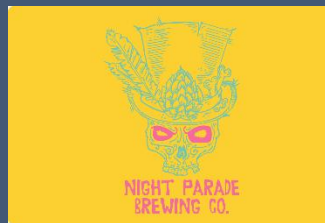


Original Recipe by:  
John Bell



## PADDLE BOAT PALE ALE

### BREW DAY

Stage/Time	Type	Qty	Name	%AA	%IBU
Mash Target pH: 5.3	Grain	11.75 lb	US Pale 2 Row	-	85.1%
		1 lb	Crystal 20L	-	7.2%
		0.75 lb	Carapils	-	5.2%
		0.31 lb	Acidulated Malt	-	2.2%
Boil/60min	Hop	1 oz	Magnum	12	33.6
Boil/15min	Fining	1 tablet	Whirlfloc	-	-
	Nutrient	½ tsp	Yeast nutrient	-	-
Whirlpool Target pH: 5.1	Hop	2 oz	Cascade	5.5	2.6
		1.5 oz	Citra	12	4.3



### American Pale Ale (18B)

Original Gravity: 1.056 – 1.070

Final Gravity: 1.008 – 1.014

Bitterness: 40 – 70 IBUs

ABV: 5.5 – 7.5%

SRM: 6 - 14

Overall Impression: A pale, refreshing and hoppy ale, yet with sufficient supporting malt to make the beer balanced and drinkable. The clean hop presence can reflect classic or modern American or New World hop varieties with a wide range of characteristics.

### FERMENTATION AND BEYOND

Stage	Type	Qty	Name	Notes
Pitch	Yeast	1 liter	WLP001 California Ale	68 – 71°F
Dry Hop	Hop	4 oz	Cascade	2 days ⇒ bottle
		3 oz	Citra	

### TARGET STATS

Batch Size	6.0 gal
OG	1.056
FG	1.012
~%ABV	5.8
Efficiency	68
IBU	40
SRM	5.7

### BREW NOTES

Mash Temp	152°F
Mash Duration	60 min
Boil Volume	7.8 gal
Boil Duration	60 min
Whirlpool Temp	165°F
Whirlpool Time	20 min

### Notes

pH can play an important role in the final flavor in any beer. For this recipe we highly recommend measuring the pH at the mash and whirlpool. Using acidulated malt helps to reduce the pH from the start, but you can gently adjust the pH at later stages by adding small doses (0.5 ml) of 88% Lactic Acid.

The measured water profile for this brew day is as follows:

Ca 100 - MG 5 - Na 8 - Sulfate 180 - Cl 60 - Bicarbonate 20

However, you can just use charcoal filtered SD tap water.