



# Sensory Analysis of Bourbon Barrel Aged Beers

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Or

# What the Hell did the Barrel do to our Beer?

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Cincinnati, OH

With the brewing assistance  
of CMI, SODZ, LAGERS,  
and TRASH

# Beer and Sweat 2008

- ◆ August 16, 2008
- ◆ All entries in kegs
- ◆ 260+ entries in 2007
- ◆ Rumors of its demise have been greatly exaggerated!
- ◆ [www.bloatarian.org](http://www.bloatarian.org) for details

# A Bit of History

- ◆ The BBL has brewed several bourbon barrel aged beers
- ◆ 13 brewers would each brew 5 gallons of the same recipe; after primary the beers would be combined into a bourbon barrel.
- ◆ Periodic sampling until the consensus said the beer was "done" (usually ~6 months)

# And the results?

- ◆ Russian Imperial Stout was outstanding
- ◆ Double IPA was very subdued in its hops and oddly sweet for the style
- ◆ American Brown and Belgian Strong Dark were good, not exceptional
- ◆ Strong Scotch Ale was infected

# This Project

- ◆ Several area clubs would brew and age a bourbon barrel beer.
- ◆ Samples would be withdrawn periodically.
- ◆ Laboratory analysis would be performed.
- ◆ Tasting and discussion would find how to best accomplish this.

# The Clubs & The Beers

- ◆ BBL: Russian Imperial Stout
- ◆ CMI: Strong Scotch Ale
- ◆ LAGERS: Baltic Porter
- ◆ SODZ: Kentucky Common
- ◆ TRASH: Belgian Dark Strong
  
- ◆ Lab analysis performed by  
Boston Beer

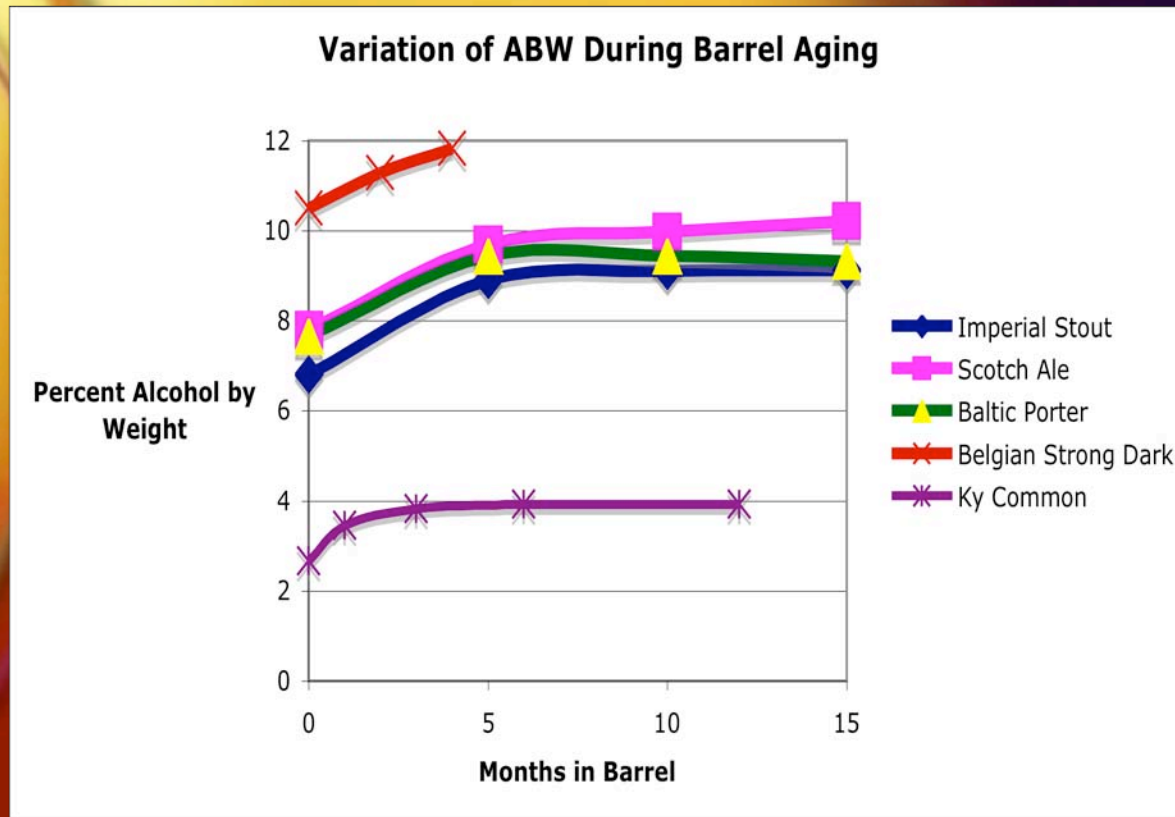
# What Did We Expect?

- ◆ Initial alcohol jump, followed by gradual decline by evaporation
- ◆ Gradual decrease in IBU
- ◆ Slight color increase from barrel char
- ◆ Possible oxidation with aging

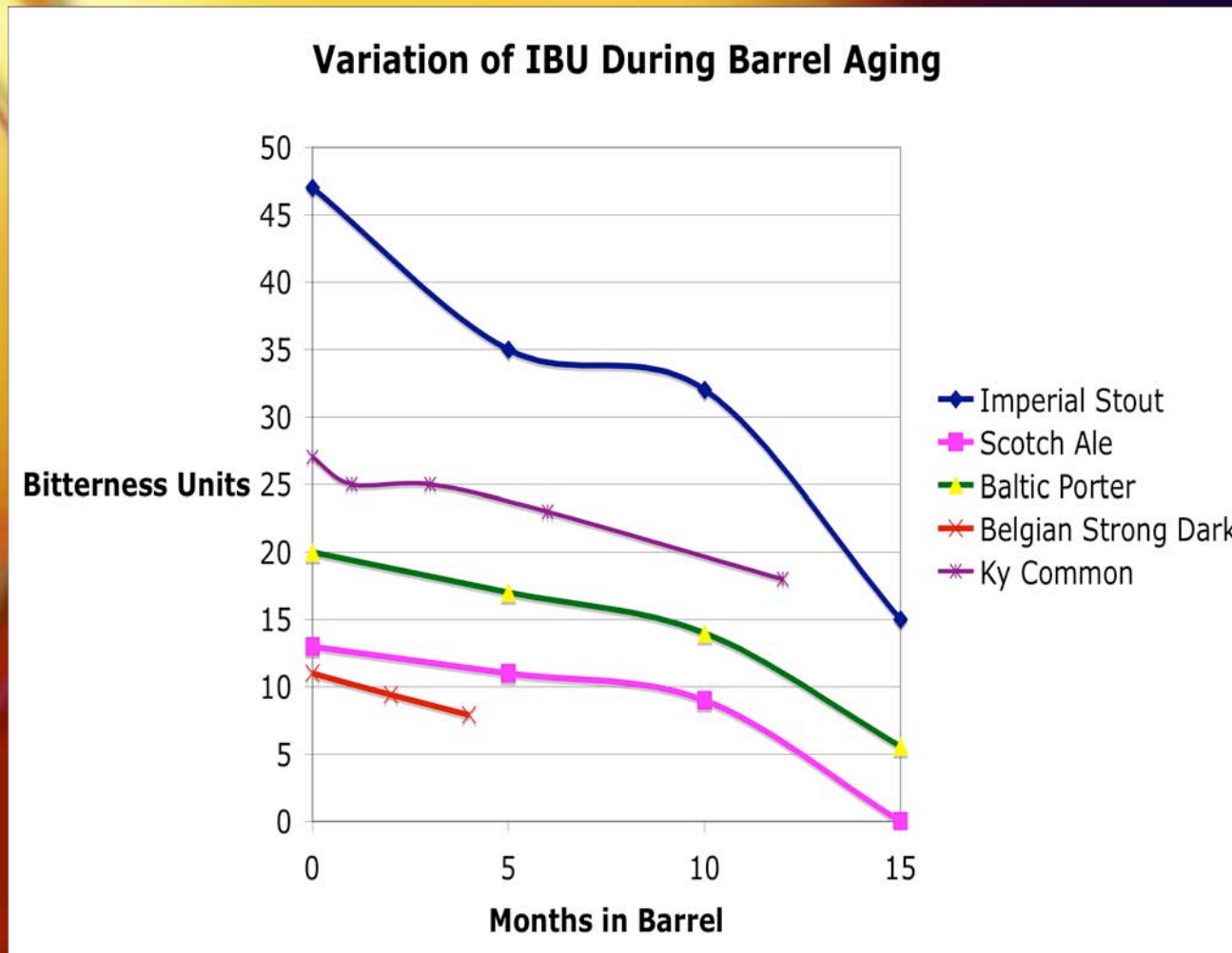
# Initial Tasting Comments

- ◆ Kentucky Common
  - ◆ Nice bourbon after 90 days, wood character strong at 180, a bit harsh at 1 yr
- ◆ Strong Scotch Ale
  - ◆ Outstanding unaged, developed sour characters as time progressed
- ◆ Belgian Strong Dark
  - ◆ Maximum age was only 4 months - bourbon character quite subdued.
- ◆ Russian Imperial Stout
  - ◆ A bit astringent while young, developed strong acetaldehyde at 15 months.
- ◆ Baltic Porter
  - ◆ Best beer tasted, although too much bourbon at 15 months.

# Alcohol Content

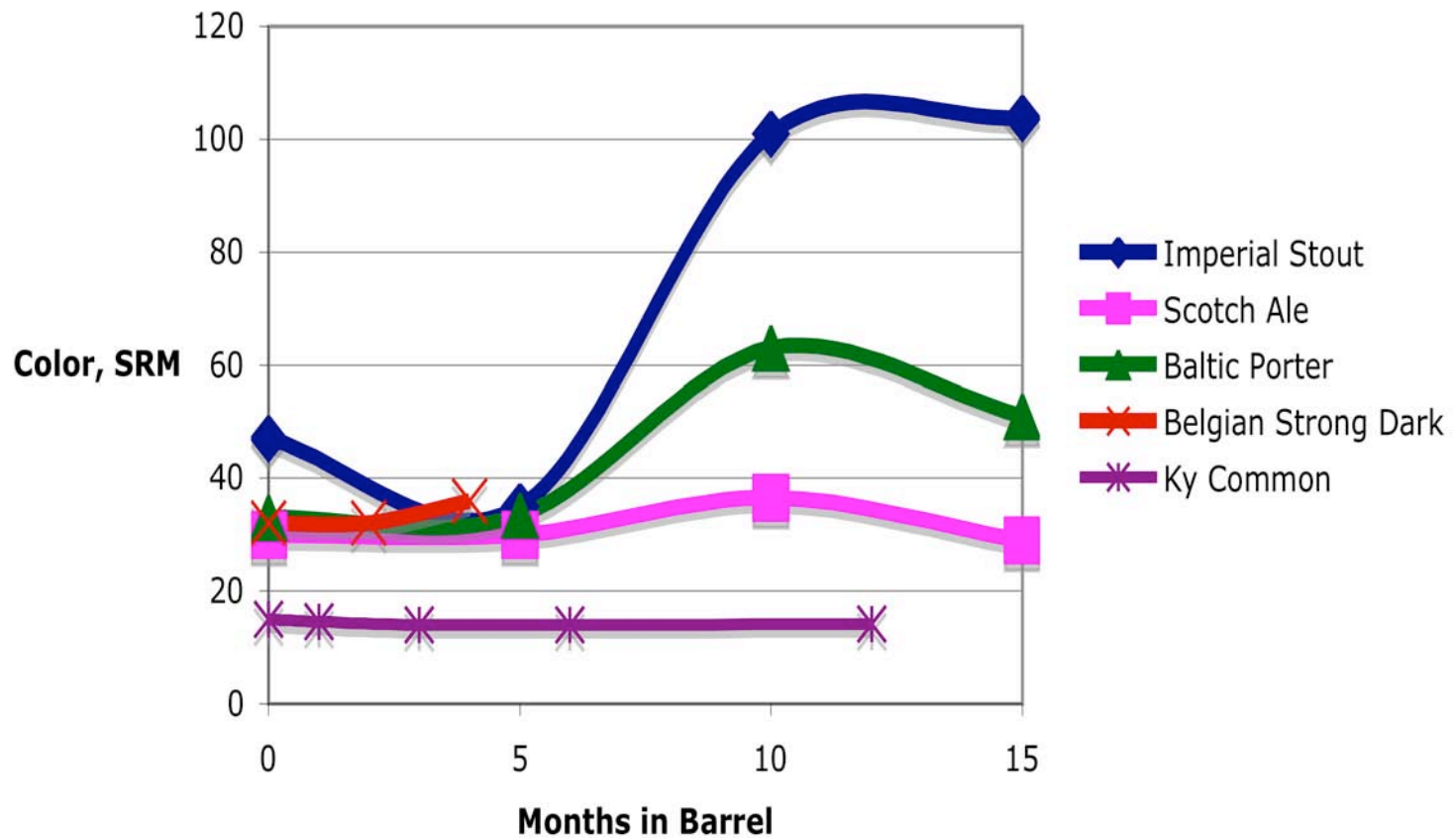


# Bitterness Level



# Color Variation

Variation of Color During Barrel Aging



# Recommendations

- ◆ Consider barrel sanitizing or rinse.
- ◆ Fill the barrel to the top, top off as needed!
- ◆ Keep barrel sealed/under CO<sub>2</sub>
- ◆ Increase Hopping Rates
- ◆ ABW will increase by ~2%

# Acknowledgements

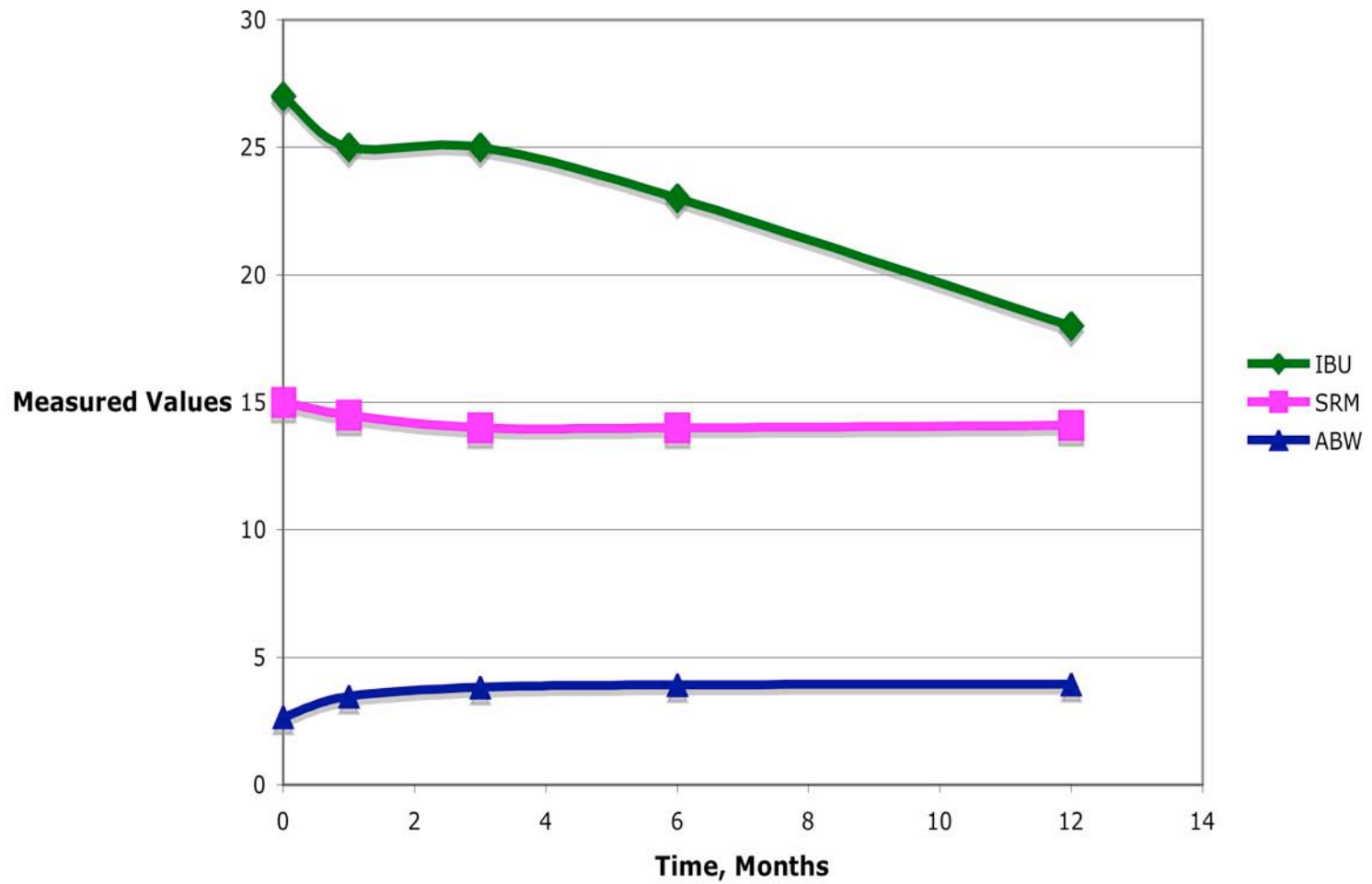
## ◆ Homebrew Clubs:

- ◆ CMI, LAGERS, SODZ, TRASH

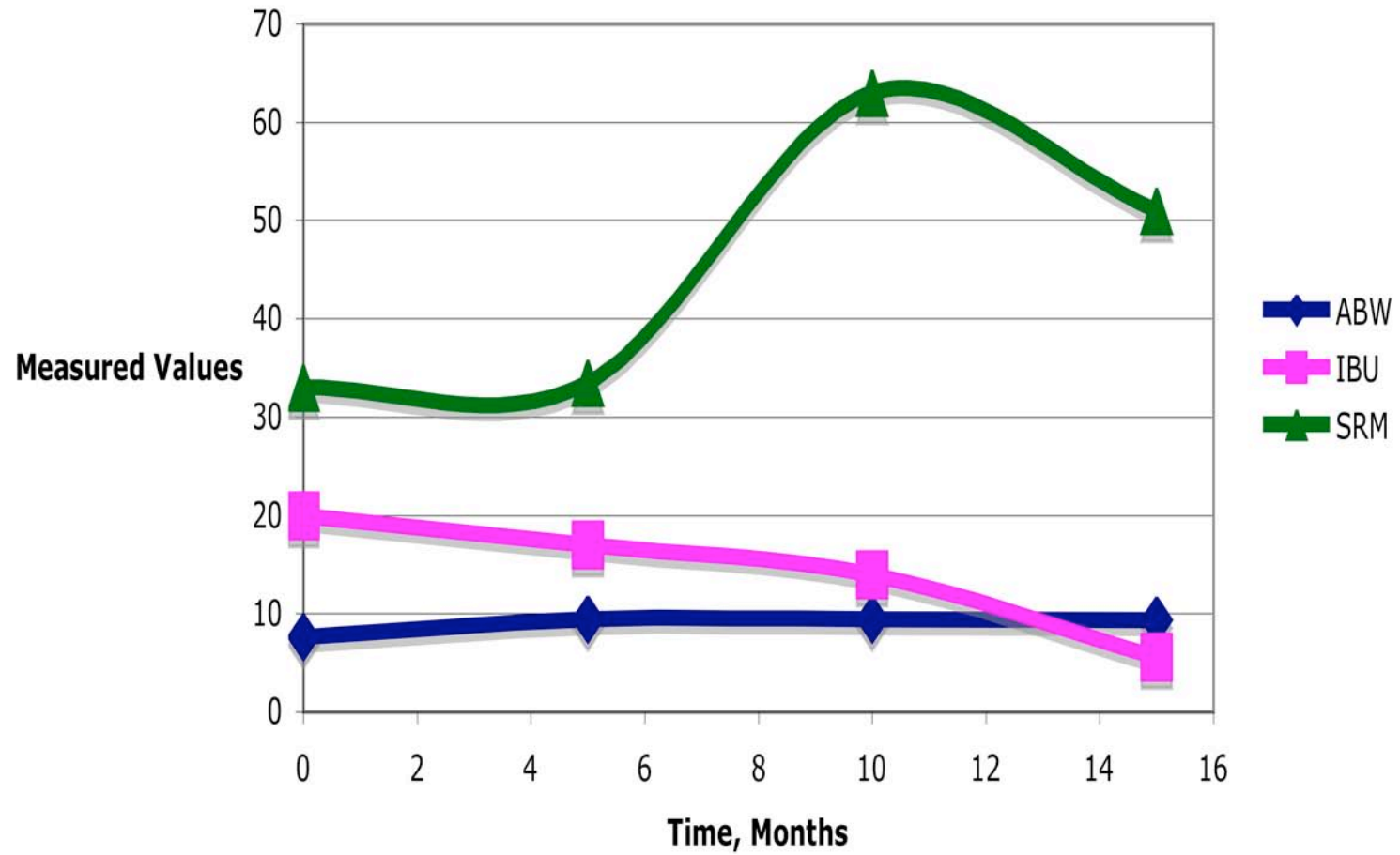
## ◆ Donations of Material or Services:

- ◆ Wyeast Laboratories
- ◆ Briess Malt & Ingredients Co.
- ◆ Hops Direct LLC
- ◆ Boston Beer Co.
- ◆ Woodford Reserve Distillery
- ◆ Listermann Brewery Supplies
- ◆ Paradise Brewing Supplies
- ◆ East End Brewing Co., Pittsburg, PA
- ◆ Columbus Brewing Co., Columbus OH

### Kentucky Common



## Baltic Porter



## Russian Imperial Stout

