



# Limitations Brewing

BAM Style of Quarter, 2019Q4

Nick Facciola



# Brew within yer limits!

- What is limitations brewing?
- Ingredient selected for this SOQ
- Malts
- Hops
- Yeasts
- Recipe formulation
- Details of competition/  
Holiday party



# What is Limitations Brewing?

- Styles are just guidelines, really...
- Constraints and creativity
- Recipe formulation and experimentation
- Ingredients were selected to open up many interpretations
- All you have to do is make it pleasing to drink

# The Ingredients



- American Base Malts
  - (Pale, 2-row, pilsner, light DME)
- Vienna or Munich
- Flaked Corn or Corn Sugar



## Classic American Hops

- Willamette
- Northern Brewer
- Cascade



## “Clean” fermenting yeasts

- WLP001 or 1056 or US-05
- WLP800 or other clean lager strains
- WLP029 or WLP080, etc.

# Vienna and Munich malts



- Similar to pale malt, kilned higher
- Higher color rating
  - Vienna: 3.5 – 5 °L
  - Munich: 5 – 10 °L
- Can use 5-10% to enhance malt, or up to 100%
- Increases body, aroma, malt characters
  - Vienna subtle malt sweetness and toasty character
  - Munich imparts rich malty and bread crust flavors





# Flaked Maize

- Fancy term for corn that has had its germ and oil removed
- Yellow corn flakes, imparts a mild, less malty flavor and body
- Drier, more crisp beer
- Use up to 40% as a cereal adjunct in the mash.
- Added to Light American lagers, Mexican Vienna lagers, cream ales, Scottish ales, milds, pre-prohibition, English bitters

# Willamette



- Considered a pillar of the US hops industry
- One of the most prolifically grown varieties in the US (accounts for 20%).
- First selected in Oregon in 1967, it received USDA accession in 1971 for public release
- 4-6% AA, mostly used for aroma
- Peppery, herbal spice with fruity and floral notes
- American Ales Brown Ale, English Ales, Porters, nut browns

# Northern Brewer

- Originated from British strain, this is a Hallertau hop released in the 1940s
- 8-10% AA, dual-purpose hop
- Aroma a mix of herbal woodiness, some pine, with just a bit of bright mint
- Often used in English Ales, German lagers and the featured hop in Anchor Steam & Porter







# Cascade

- Developed by USDA around 1972 in Oregon
- 4.5 – 8% AA, a dual-purpose hop
- Great for dry hopping
- Fruity, citrus or grapefruit aroma, spicy notes
- Cascade brightens-up IPAs, APAs, and other American Ales. Also barleywine, pre-prohibition porters, some lagers
- Racer 5, Liberty Ale, Sierra Nevada Pale Ale

# Clean-fermenting yeasts

- American Ale Yeast
  - White Labs WLP001
  - Wyeast 1056
  - US-05
- Clean lager strains
  - WLP800
- Kölsh yeast WLP029
- Cream ale yeast WLP080



# Recipe formulation

- The pale, 2-row, Pilsner, Vienna, Munich can be used in any quantities.
- 1 or 2 pounds of Vienna or Munich can add nice malt backbone to an IPA
- All Vienna or Munich can make good beer too
- Can build into styles, adapt, or free-form
  - CA Common, Munich Alt, APA and IPA, Bitter, cream ale, KY Common, dark lagers

# Competition details

- SOQ4 lines up with BAM HOLIDAY PARTY
- This is a PEOPLES CHOICE competition. To enter you must bring a keg to our annual Holiday party in December. This mean each attendee will vote on what they liked 1st, 2nd, and 3rd best.
- You can technically participate without a keg, but you might have limits on getting enough votes if you run out!