

# APRIL EDUCATION

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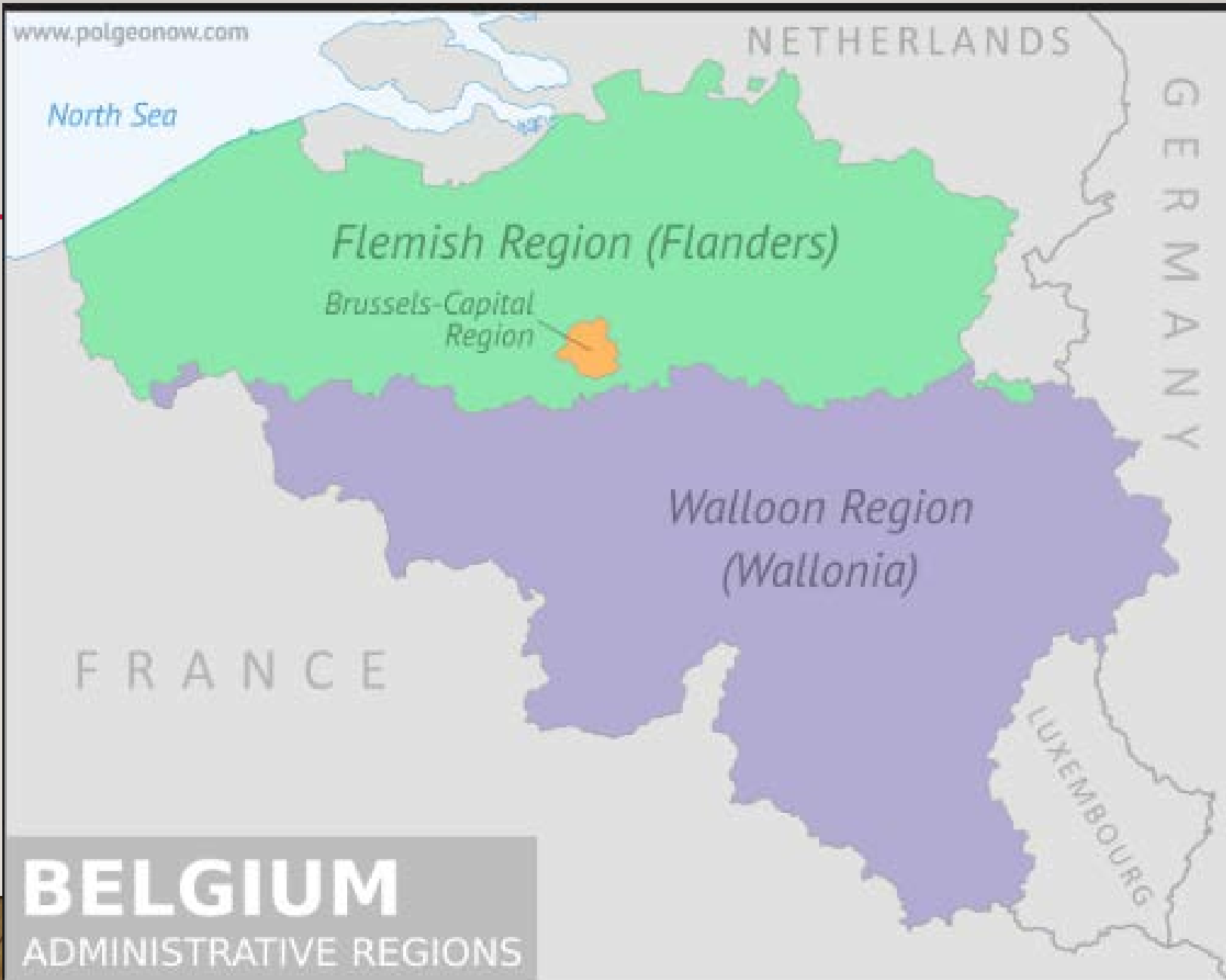
JEFF MOCK



# STYLES OVERVIEW

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- Witbier 24A
- Biere de Garde 24C
- Saison 25B
- Fruit and Spiced Beer 29B
- Catharina Sour X4



# WITBIER 24A

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- AKA Biere Blanche, dates back to the 14<sup>th</sup> century brewed in monasteries or family farms
- Province of Broadbent is the home region, Hoegaarden came to prominences ~16<sup>th</sup> century
- Style almost died by the late 1950s; Pierre Celis opened a small brewery dedicated to Witbier
- Later was incorporated to Interbrew □ due to brewing differences sold all his shares moved to America opened up Celis Brewing Company



# WITBIER 24A

- **CHARACTERISTICS**

- Wheat beer often with added spices such as coriander or grains of paradise
- Straw yellow to pale gold colors with citrus like esters in the finished beer
- Low hop characteristics, spice coming from the yeast and adjuncts
- Effervescent spritziness

- **INGREDIENTS**

- Pils and unmalted wheat, small amount of oats
- Noble hops
- Coriander, chamomile, orange peel, and curacao
- Yeast  WLP400/410, W YEAST 3944/3463/3942



QUICK CHARACTERISTICS	
<b>Color Range:</b>	2 – 4 SRM
<b>Original Gravity:</b>	1.044 – 1.052 OG
<b>Final Gravity:</b>	1.008 – 1.012 FG
<b>IBU Range:</b>	8 – 20
<b>ABV Range:</b>	4.5 – 5.5%
<b>Appearance:</b>	Ranges from straw colored to pale yellow-gold; Dense and creamy white head with excellent retention; Clarity will be hazy and cloudy.
<b>Aroma:</b>	Light & sweet maltiness with possible grainy tartness; Possible notes of honey or vanilla; Yeast adds notes of pepper & spice; Hoppiness will be low & balanced, with spicy or herbal qualities; Citrusy fruitiness possible; No vegetal characteristics in this style.
<b>Flavor:</b>	Sweet maltiness with possible notes of vanilla, honey or orange zest; May have tarty wheat flavors; Herbal spices should be noticeable; Little to no hoppy flavors; Low bitterness; Vegetal, soapy or excessive bitterness is not acceptable.
<b>Mouthfeel:</b>	Smooth, creamy mouthfeel; Medium-light to medium body with high carbonation; Dry finish.

# WITBIER 24A

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- BREWING

- Step mash, protein rest @ 122F then heat to mid 150s to complete conversion □ rice hulls to avoid stuck sparge
- Addition of spices last ~5 min of boil
- Fermentation suggestion is to start cooler (mid-high 60s) after a couple of days ramp up to warmer temps (low-mid 70s)



# BIERE DE GARDE 24C

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- Brewed on the French side of the Franco-Belgian border
- Originally closer to Saison but the French adopted a malt forward style fermenter at much cooler temps □  
closer to Kolsch or Altbier traditions
- Traditionally “Lagered”; can be cellared at breweries
- Crisp beer, biscuit-toffee like flavors
- Lacks the spice/bitterness of a Saison



# BIERE DE GARDE 24C

- **CHARACTERISTICS**

- Malt forward beer; golden to deep brown, higher ABV
- Minimal hop aroma and flavors
- Should be a dry and well attenuated beer
- Yeast character should be minimal

- **INGREDIENTS**

- Pils or a Pale malt base, Vienna, Munich, Caramel, Wheat, Biscuit, Aromatic, and possible Chocolate
- Alsatian Strisselspalt hops; German Hallerauer, Czech Saaz, Tettanger, or Spal
- Use a German Yeast strain or possibly French Ale, or Lager strains

## QUICK CHARACTERISTICS

<b>Color Range:</b>	9 – 19 SRM
<b>Original Gravity:</b>	1.060 – 1.080 OG
<b>Final Gravity:</b>	1.008 – 1.016 FG
<b>IBU Range:</b>	18 – 28
<b>ABV Range:</b>	6.0 – 8.5%
<b>Appearance:</b>	Range from golden to copper red to deep brown; Head may range from bright white to light tan; Clarity will range from brilliant to hazy.
<b>Aroma:</b>	Sweet & rich maltiness; Minimal hoppy aromas with herbal, spicy or peppery notes; Low to moderate esters possible; Stronger versions may have slight alcohol warmth.
<b>Flavor:</b>	Malty flavors will range from medium to high, while hops will remain low in bitterness to provide balance; Noticeably smooth with low to medium esters or alcohol warmth; Medium-dry finish with malty aftertaste.
<b>Mouthfeel:</b>	Body will be medium-light to medium with creamy smoothness; Moderate alcohol warmth, but never hot; Carbonation ranges from medium to high.
<b>Serving &amp; Storage</b>	48-50°F



# BIERE DE GARDE 24C

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- BREWING

- Mash in ~150F and possible longer mash rest
- Fermentation is within the range of your yeast strain of choice
  - Kolsch and Altbier strains, German/Bohemian Lager strains, and possibly some French ale or saison strains
- Recommended Lager time is ~2 months or more
- There is a Blonde, Brune, and Ambree; ensure malt bill matches
- End Goal  Dry, well attenuated beer that is malt forward with lower hop flavor and bitterness



# SAISON 25B

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- Brewed on Wallonia farms in Belgium; ~1700s
- Not strict style
- Brewed by farmers for seasonal workers “Les Sasionniers”
- Brewed in winter for summer
  - Staved off infections/beer not as infected
  - Lacto souring characteristics
- Modern Saisons, higher ABV after WWII



# SAISON 25B

- **CHARACTERISTICS**

- Supposed to be a light and refreshing style
- Most times pale and bitter; can be sour
- Fruity and spicy; bitter but not overly phenolic, yeast driven
- Noble hops i.e. Saaz, Tettanger, EKG, etc. □ Dry hopping

- **INGREDIENTS**

- Traditionally, what was on hand
- Modern: Pils malt, Vienna, Munich, Flaked wheat etc.
- Hard water
- Noble hops
- Yeasts: DuPont strains and French Saison strains



## QUICK CHARACTERISTICS

<b>Color Range:</b>	5 – 14 SRM (pale)	15 – 22 SRM (dark)
<b>Original Gravity:</b>	1.048 – 1.065 OG (standard)	
<b>Final Gravity:</b>	1.002 – 1.008 FG (standard)	
<b>IBU Range:</b>	22 – 35	
<b>ABV Range:</b>	3.5 – 8.0% (table)	5.0 – 7.0% (standard)
<b>Appearance:</b>	Usually pale orange. Can range from light gold to amber orange. Likely hazy with long-lasting head.	
<b>Aroma:</b>	Fruity esters dominate. Low to moderate hops. Little malts. Notes of herbs, spices & alcohol aromas.	
<b>Flavor:</b>	Fruity & spicy flavors prevail. Malts, yeast & tart sourness linger. Low hoppiness. Dry finish with bitter spicy aftertaste.	
<b>Mouthfeel:</b>	Light to medium mouthfeel with high carbonation & effervescence. Tart is common. Dry finish.	

# SAISON 25B

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- BREWING

- Low mash temps, targeting highly fermentable wort
- Pale malts, spelt, wheat, and dark malts
- Typically not spiced
- Sugar or honey can be used to help dry out beer
- White Labs: Belgian Saison I ([WLP565](#)), Belgian Saison II ([WLP566](#)), and Belgian Saison III ([WLP585](#))  590
- Wyeast: Belgian Saison ([3724](#)) and French Saison ([3711](#))
- **Personal Anecdote**  **Ferment warm for all the above strains ESPECIALLY the DuPont Strain**  **565 or 3724**



# FRUIT AND SPICED 29B

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- Most info depends on the base beer  Fruited Lambics aren't included
- Aromatics should be of the fruit added, certain fruits have stronger or more complex aromatics
- Flavors should be balanced between the base beer and the fruit  fruit added should be appropriate for the base beer
- Spiced beer is most anything that includes spices which can even be dried fruit peels
- Spiced beer characteristics share much in common with fruited beer



# CATHARINA SOUR X4

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- Brazilian kettle soured wheat beer, features fresh (tropical) fruit
- Higher ABV than a Berliner Weisse
- Moderately carbonated refreshing beer, sourness should be prominent but not hide the fruit
- Originated from the Santa Catarina state of Brazil in 2015
- Historically German brewing influences



# CATHARINA SOUR X4

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- **INGREDIENTS**

- Pils and unmalted wheat as the base
- Kettle souring techniques utilized; fermented later with a clean ale yeast US-05
- Noble hops
- Fresh fruit; tropical preferred if keeping traditional

- **BREWING**

- Step mash starting in the 120s for a protein rest, then ramp up to low 150s for conversion
- Utilize some sort of lacto to kettle sour until pH lowers to ~3.5 or to taste
- Low usage of hops
- Fresh fruit after primary fermentation has subsided



# QUESTIONS





# SOURCES

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- Kegarator's Learning Section <https://learn.kegarator.com>
- 2015 Beer Judge Certification Program style guide <https://dev.bjcp.org/beer-styles/x4-catharina-sour/>
- Brew Your Own Online <https://byo.com>
- *"Farmhouse Ales: Culture and Craftsmanship in the Belgian Tradition"* For Markowski
- Pictures came from google.com images