• UCBC In A Nutshell
  – History of the Brewery
  – Dave & Florian
  – Our Philosophy
UCBC Story

Florian Kuplent & David Wolfe

Co-Founders
Beck Divergence
New/Old World Approach
“When you come to a fork in the road, take it!”

Revolution (Urban)
Our contribution to the renaissance of craft beer

Reverence (Chestnut)
Our celebration of beer’s heritage
Brewing Process

Malting  →  Mash  →  Lauter  →  Boil  →  Whirlpool  →  Fermentation
Series: Reverence Series
Style: Grodziskie
Grätzer
Glassware: Footed Pilsner
First Brewed: 2015
Available: Draft
Ingredients:
- Malt: Oak Smoked Wheat Malt
- Hops: Austrian Malting
Specs:
- ABV: 3.4
- IBU: 22
- OG: 8.2
- SRM: 4
- Color: Pale Gold

Tasting Notes:
- Aroma: A moderate oak smoke aroma along with a low wheat aroma. Malling hops contribute a low herbal aroma.
- Appearance: Pale gold, clear, with a white head.
- Flavor: A medium oak smokiness is the most prominent flavor and lingers in the finish. The wheat provides a subtle sweetness to balance the bitterness of the beer. A low herbal hop aroma is also present.
- Mouthfeel: Medium-light body, medium carbonation

Name Explanation: The Polish city of Grodzisk is renowned for its low gravity beer made with oak-smoked wheat malt (aka Grodziskie), but without the deeds of a Benedictine monk named Bernard, the brewing history in this city could have died long ago. According to legend, he arrived in Grodzisk in 1500 to find the wells were running dry. Thanks to his efforts, the water began flowing through the wells again, and the beer brewed with this water tasted even better than before! We pay reverence to Bernard with our version of this classic beer. Na zdrowie! / Prost!

www.urbanchestnut.com
HOPSWITCH
Single Hop IPA (Rakau)

Series: Revolution Series
Style: Single Hop IPA
Glassware: Nucle
First Brewed: 2015
Available: Draft
Ingredients:
- Malt: Pale Ale, Caramel
- Rye
- Hops: Rakau (from New Zealand)
Brewing Info: Part of our Single Hop IPA Series
Specs:
- ABV: 5.2
- IBU: 45
- OG: 14
- SRM: 59
- Color: Copper

Tasting Notes:
- Aroma: A prominent hop aroma with peach, apricot and tropical fruity notes and light piney and pepper-like aroma from Rakau hops. A light biscuity/caramelly maltiness supports the hop character.
- Appearance: Copper color. Moderate, long-lasting, off-white head.
- Flavor: The flavor of Rakau hops (peppery, orchard/tropical fruits) dominate as well as a medium high hop bitterness. However, the biscuit and caramel notes from the malt provide a sufficient balance to the hop character.
- Mouthfeel: Medium body. Medium carbonation

Name Explanation: Hopswitch is part of our Single-Hop IPA Series, which demonstrates how a beer’s flavor and aroma can vary simply by changing the hops in an otherwise identical beer. This version utilizes Rakau hops from New Zealand, a hop with notes of orchard and tropical fruit notes as well as a slight peppary character.

www.urbanchestnut.com
Niigata is 3rd in Sake Production of all Prefectures
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Currently just over 90 Breweries in Niigata
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Currently just over 90 Breweries in Niigata

Niigata is famous for Sake, Rice, Skiing and Snow!
WHAT IS SAKE?

- Wine? Beer? Spirit?
WHAT SAKE IS NOT?

Wine
Alcohol fermented from fruit.

Beer
Alcohol fermented from malted grain (usually Barley) with hops used for flavoring.

Spirits
Alcohol produced by distilling ethanol from fermented fruits, grains or vegetables.
WHAT IS SAKE?

- Wine? Beer? Spirit?
- Sake is a BREWED alcohol made from Rice.
WHAT IS SAKE?

• Wine? Beer? Spirit?
• Sake is a BREWED alcohol made from Rice.
• Sake uses a two step fermentation process.
WHAT IS SAKE?

- Wine? Beer? Spirit?
- Sake is a BREWED alcohol made from Rice.
- Sake uses a two step fermentation process.
- Sake converts Starch to Sugar and Sugar to Alcohol in the same tank at the same time.
SAKE INGREDIENTS?

- Water
- Yeast
- Koji
- Rice
Water
Yeast
Koji Mold
Koji Making
Sake Rice
Starting with Rice
Starch in the Core
Milling Machine
Milling Stone
Milled Sake Rice
Sake Classifications
Sake Classification System

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<tr>
<th>Rice Milling</th>
<th>Percentage of rice grain remaining after milling</th>
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Pure Rice Style

Ingredients:
Rice, Water, Yeast, Koji
Sake Classification System

Rice Milling

Percentage of rice grain remaining after milling: 90% 80% 70% 60% 50% 40% 30% 20% 10%

Pure Rice Style

Ingredients: Rice, Water, Yeast, Koji

Alcohol-Added Style

Ingredients: Rice, Water, Yeast, Koji + Distilled Alcohol
Sake Classification System

Rice Milling

Percentage of rice grain remaining after milling: 90% 80% 70% 60% 50% 40% 30% 20% 10%

Pure Rice Style

Ingredients:
Rice, Water, Yeast, Koji

JUNMAI No Minimum Rice Milling Requirement

Alcohol-Added Style

Ingredients:
Rice, Water, Yeast, Koji + Distilled Alcohol
Sake Classification System

Rice Milling:
- Percentage of rice grain remaining after milling:
  - 90%
  - 80%
  - 70%
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  - 40%
  - 30%
  - 20%
  - 10%

Pure Rice Style:
- Ingredients: Rice, Water, Yeast, Koji
- Minimum of 60% Remaining → JUNMAI GINJO

JUNMAI:
- No Minimum Rice Milling Requirement

Alcohol-Added Style:
- Ingredients: Rice, Water, Yeast, Koji + Distilled Alcohol
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**Ingredients:** Rice, Water, Yeast, Koji

**Pure Rice Style**

- Minimum of 50% Remaining → **JUNMAI DAIGINJO**
- Minimum of 60% Remaining → **JUNMAI GINJO**

**JUNMAI** No Minimum Rice Milling Requirement

**Alcohol-Added Style**

- Ingredients: Rice, Water, Yeast, Koji + Distilled Alcohol

**FUTSU-SHU** No Minimum Rice Milling Requirement

© 2015 Timothy Sullivan
Sake Classification System

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**Ingredients:** Rice, Water, Yeast, Koji

**Pure Rice Style**

- Minimum of 50% Remaining → **JUNMAI DAIGINJO**
- Minimum of 60% Remaining → **JUNMAI GINJO**

**JUNMAI** No Minimum Rice Milling Requirement

**Alcohol-Added Style**

<table>
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- Minimum of 70% Remaining → **HONJOZO**

**FUTSU-SHU** No Minimum Rice Milling Requirement

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Sake Classification System

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**Ingredients:** Rice, Water, Yeast, Koji

- **JUNMAI DAIGINJO**
  - Minimum of 50% Remaining

- **JUNMAI GINJO**
  - Minimum of 60% Remaining

**Pure Rice Style**
- **JUNMAI**
  - No Minimum Rice Milling Requirement

**Alcohol-Added Style**
- **DAIGINJO**
  - Minimum of 50% Remaining
  - Minimum of 60% Remaining

- **GINJO**
  - Minimum of 70% Remaining

- **HONJOZO**

- **FUTSU-SHU**
  - No Minimum Rice Milling Requirement

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HAKKAISAN JUNMAI GINJO

Rice Milling Rate: 50%

Sake Rice: Yamadanishiki

Alcohol: 15.6%

Sake Meter Value: +5.0

Acidity: 1.2
HAKKAISAN TOKUBETSU HONJOZO

Rice Milling Rate: 55%

Sake Rice: Gohyakumangoku

Alcohol: 15.4%

Sake Meter Value: +5.0

Acidity: 1.1
HAKKAISAN TOKUBETSU JUNMAI

Rice Milling Rate: 60%
Sake Rice: Gohyakumangoku
Alcohol: 15.5%
Sake Meter Value: -1.0
Acidity: 1.4
Amino Acid: 1.3
SAKE EXPORTS TO THE WORLD

JAPAN SAKE EXPORTS

$100 (In millions of U.S. dollars)

$94.0

$33.7

$43.6

$21.3

'05 '06 '07 '08 '09 '10 '11 '12 '13 '14

SOURCE: Japan Sake and Sochu Makers Association
Janet Loehrke, USA TODAY
SAKE EXPORTS TO THE WORLD

- Exports of Japanese sake climbed to $101 million 2015
- 9.3% increase over 2014
FACTORS HELPING SAKE EXPORTS

• Traditional Japanese cuisine, called “Washoku,” was added to the UNESCO List of Intangible Cultural Heritage in 2013.
• Trans Pacific Partnership - U.S., Canada agreed to eliminate tariffs on sake.
DIFFERENCES IN THE U.S. SAKE MARKET

• Americans in particular tend to buy higher-end, higher-priced sake, as compared to Japan.
• The average price of sake exported to the United States is about $9 a liter — twice the price of the average sake sold in Japan.
HAKKAISAN ON THE WEB!

• Follow us on Twitter: @HakkaisanSake

• Visit us on the Web:
  http://www.Hakkaisan.com

• Find us on Facebook.
  http://www.facebook.com/HakkaisanSake
INTRODUCTION
OF
MASUMI

Katsuhiko Miyasaka
Miyasaka Brewery Co. Ltd.
Location - Suwa, Nagano
History

- found in 1662
- 1700’s : started using the brand name ‘Masumi’
- 1900’s : Masaru Miyasaka (three generation before) started to aim the best quality sake in Japan.
- 1946 : Association Sake Yeast No.7 was discovered.
- 1960’s-70’s : became the biggest brewery in Nagano region.
Nowadays

- Production volume: 1,620,000 litters / year (2,250,000 bottles) / year

- 35th biggest sake brewery in Japan (1,200 breweries in Japan)

- Sales: Local 42% / Outside Nagano 50% / Export 8%

- Numbers of workers: 70 / brewing season: 95
Suwa Kura
Original Brewery

- 35% of product is made
- bottling facility
- tasting room & shop
- comparatively soft water
Fujimi Kura - Second

- 65% of product is made here.
- comparatively hard water
- near Suntory Hakushu Whisky distillery.
TRADITIONS & INNOVATIONS OF SAKE MAKING IN JAPAN

Katsuhiro Miyasaka
Miyasaka Brewing Co LTD
YAYOI PERIOD (300BC-250AD)  
BEGINNING OF SAKE IN JAPAN

- Brought from China with the culture of cultivating rice in 3rd century BC, the time called Yayoi-period.
- China and Korea make alcohol products from rice.
- Sake-making is developed differently in each countries.
HEIAN PERIOD (AD 794-1185) 
SAKE BREWED IN TEMPLE

- The **temple** was the center of information and technology brought from China in 7th century.
- Sake (and many other things) were mainly made in temples by Buddhist monks.
- Bodaimoto 菩提酛
  The way to produce lactic acid organically with the water used for washing and soaking rice.
EDO ERA (AD1600-1868)  
CAPITAL OF SAKE - NADA & FUSHIMI

- Nada region (Kobe)
- Fushimi region (Kyoto)
- Wakayama
EDO ERA (AD1600-1868) PASTEURIZATION & BARRELS

- **Pasteurization**
  Developed to stabilize the quality of sake.

- **Wooden Barrels**
  Before wood, pottery was used; wood barrels allow larger production volume.
MEIJI PERIOD (1868-1912)
BIOLOGICAL BREAK THROUGH

• Institute of Sake Brewing was founded by new government with support of many scientists

• Sake-making knowledge and techniques started to be researched scientifically and biologically.
ASSOCIATION SAKE YEAST

No. 1  found at Sakura-Masamune in Kyoto (1906)
No. 2  found at Gekkeikan in Kyoto (1908)
No. 3  found at Suishin in Hiroshima (1914)
No. 4 found at some brewery in Hiroshima (1924)
No. 5 found at Kamozuru in Akita (1924)

- No. 6 found at Aramasa in Akita (1930) - oldest yeast still used.
- No. 7 found at Masumi in Nagano (1946) - most commonly used yeast.

still continuing…
VARIETIES OF YEAST STARTER

- 生酛 Kimoto - grow lactic acid organically by mashing rice
- 山廃 Yamahai - grow lactic acid organically without mashing rice
- 速醧 Sokujyo - adding artificial lactic acid; faster and safer
DURING WORLD WAR 2

- Shortage of rice
- Government allowed adding pure alcohol and additives to sake in order to supply enough sake to the market.
- Government forced sake breweries to merge to decrease the number of makers. In the end, the number had fallen to $\frac{1}{3}$.
AFTER THE WAR

- Rice shortage continues into 1950's.
- Institute of Sake Brewing developed and shared the technique and idea to increase alcohol.
- Sales and volume of sake peaked in 1975.
- Most sake in the market was Futsu-shu - standard level sake - which means sake with additives.
MARKET SHRINKING

• Sake production and consumption began falling after 1975.

• Major manufacturers monopolized the market. Small makers had to innovate.

![Graph showing the shrinkage of the market from 1970 to 2010, with a notable drop after 1975. The graph shows that the consumption dropped down to ⅓ of its original level.]
NEW CATEGORIES OF SAKE

• Daiginjo Sake / Ginjo Sake
  – Development of rice polishing machine made it possible to polish up to higher level
  – Development of new sake rice and varieties of yeast

• Nama Sake
  – Unpasteurized sake
  – thanks to development of cold distribution chain
CURRENT TRENDS

• Lower alcohol level
• Different levels of polishing ratio from lower to higher.
• Sparkling Sake: champagne method
• Using white *koji* fungus to have decent level of acidity.