

### “A Journey Through America: Understanding American Whiskey”

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### Industry On & Off Premise: Selling to your customer

- First; make sure your spirits menu / selections are up to date with new category offerings from your wholesaler's.
- Become the expert; this seminar will be a great start.
- Education is key in selling and upselling to your clients which in turn adds to your bottom line; ask your wholesaler to come in and train you and your staff; not once but until the staff is comfortable on all categories.
- Attend and create local American whiskey events and learn how unique Bourbon, Tennessee, Rye, Craft etc. are different from each other.
- Offer to your client as a unique event, similar to a wine tasting.

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### DISTILLED SPIRITS 101

7 categories –

1. Whisk(e)y – (Old World Roots)
2. Brandy – (Old World Roots)
3. Vodka – (Old World Roots)
4. Gin – (Old World Roots)
5. Liqueurs – (Old World Roots)
6. Rum – (New World Roots)
7. Tequila – (New World Roots)

Important to remember on the 7 Distilled Spirits Categories. The Distilleries Global location, country of origin laws and regulations, agricultural product used, type of stills used, age / no age, barrels / no barrels, and steps to a finished product are crucial in identifying the differences.

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## Whisky / Whiskey 101

- After the process of distillation was discovered, it was only a matter of time that people would use the product that was available, cheap and easy to use. Wherever there is an abundance of grain, Whisky/Whiskey is produced.
- Whiskies are produced from cereal grains only = malted / mashed, fermented, distilled at no more than 190 proof, matured in new or old oak barrels of various sizes, then placed in the bottle at no less than 80 proof.
- Grains most typically used for Whisky/Whiskey are corn, barley, rye and wheat.
- Whisky comes from Celtic word Uisgebeatha or Uisgebaugh (pronounced whis-geh-BAW = Water Of Life). English found word too difficult to pronounce and shortened it to Whisky.
- Scotland/Canada – Whisky.
- Ireland – Whiskey.
- USA – Traditionally Whiskey, depends on Distillery.

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## Philosophy of Whisk(e)y

### Distilling is a Science

The challenge to the distiller – control and repeat a naturally variable process

- Controlling ingredients
- Controlling fermentation
- Controlling distillation

### Blending is an Art

- The challenge to the Master Blender - ensure every bottle tastes the same
- Quality check the whisky at every stage
- Allocate the maturing inventory to blends as the whiskies mature
- All judgments are made by smell and taste, guided by experience

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## Whiskey Production



Mashing & Milling



Fermentation



Distillation



Maturation (Aging)

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**FIVE STEPS TO A FINISHED PRODUCT:**

**1 & 2 - Milling and Mashing:** After the grains have passed inspection for quality, (At least 51% corn for Bourbon, 51% Rye for Rye etc.) they are ground through a mill into meal. The meal is treated to convert the condensed mass of starch into more of a soluble material which can be converted to sugar and then to alcohol. The grains are mixed with filtered water and cooked. Depending on the individual distillery, either non-pressurized or pressurized mash tubs are used, which will break down the grain into starch. The starch will sponge up the water and become a thick, gooey liquid called "beer" and after a few hours the "beer" is ready for fermentation. A portion of "spent beer" from a previous day's run is added to the new mash creating "sour mash". Spent beer is the distiller's beer after the alcohol is removed; it is also called slop or still-age. It is sold as cattle feed.

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**3 - Fermentation:**

The individual distillery's secret yeast formula is added and this will begin converting the sugars from the starch into alcohol over a period of three to four days. During this process the mash has been transformed into "distillers beer" and is ready for distillation.

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**Fermentation**

**Sugar + Yeast = Alcohol + Carbon Dioxide + Heat**

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### MAKER'S MARK FERMENTATION



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### FOUR ROSES FERMENTATION



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### 4 - Distillation:

The yellowish liquid is transferred into Cooper Pot Stills or into a large steel column or Continuous Still and passes through perforated baffle plates. It is vaporized under exact controlled temperatures and the vapors are changed in condensers to a liquid called "low wine". A second distillation takes place, mellowing and adding natural important flavors and aromas, becoming a clear, colorless spirit.

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### Distillation

- The process that separates and captures alcohol from any liquid containing alcohol
- Possible because alcohol vaporizes at 173 degrees, while water vaporizes at 212 degrees
- As alcohol vapors rise, they are captured, cooled, and stored in a container
- Proof measures alcohol content
  - 100 Proof = 50% alcohol by volume

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### FOUR ROSES DISTILLATION



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### JIM BEAM STILL SPIRITS SAFE



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### 5 - Maturation:

The spirit is transferred into large tanks in the cistern room; the alcohol content lowered with distilled water and pumped into charred new white oak barrels. Here the oak barrels will play a significant and important role during maturation. The char in the barrels imparts the deep red color and helps support the evolution of vanilla and caramel flavors by breathing in and out of the charcoal layer. The warehouses or rack-houses used are not air tight, therefore as seasons change, so does the whiskey. During the cooler months of the year the barrels will constrict and little whiskey will flow through the char line to pick up the oak flavors. However, during the warmer months, the barrels will expand and the whiskey will flow in and out of the char line.

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### JIM BEAM MATURATION



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### HEAVEN HILL MATURATION



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### PROOF

One more legacy the Bourbon industry has left is how the word "Proof" was conceived. Proof is the alcohol concentration of distilled spirits and other alcoholic beverages. An example would be 100 proof which equals 50% alcohol. Legend and Lore has Proof initially determined by mixing equal amounts of whiskey and gunpowder, then applying a flame. If the gunpowder failed to burn, the whiskey was too weak and if it burned too brilliant, it was too strong. When the flame burned evenly and had a blue flame, it was "proofed", or 100% proofed right and entered as the customary way by which the strength of distilled spirits were measured. Of course, since this time technical instruments have taken over from gunpowder as gauging the strength of alcoholic beverages.

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### Spirit Dilution Formula:

Example- If you have one ounce of 120 proof (60% alcohol) whiskey that you want to be 90 proof (45% alcohol).  
 $60\% - 45\% = 15\% \div 60\% = 25\%$  of dilution or you must add  $\frac{1}{4}$  ounce of water to the one ounce of 120 proof whisky to dilute it to 90 proof.

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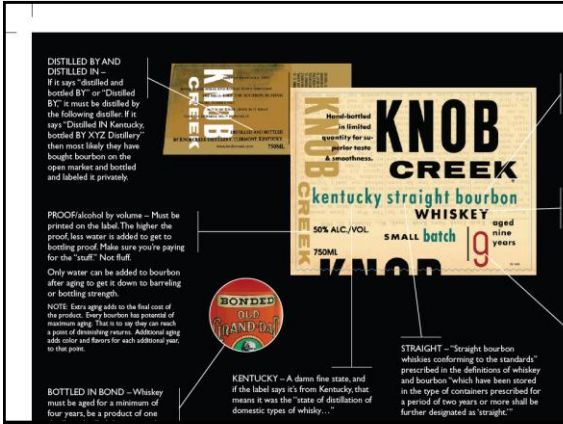
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## American Whiskey:

American Whiskey – Country of origin is exclusively America. The Distilleries style, cereal grains used and steps to a finished product are crucial in identifying the differences

- Bourbon – Made anywhere in the US, with a minimum of 51% corn plus a combination of rye, barley or wheat, distilled at 160 proof or less, not introduced to the barrel at higher than 125 proof and aged in charred new white oak barrels. The barrels can only be used once, then discarded. No additives can be introduced.
  - All Bourbon is Whiskey, but not all Whiskey is Bourbon.
  - Sour Mash – Uses a quantity of leftover liquid from previous mash to start new mash.
- Straight Bourbon – Bourbon Whiskey stored in charred new oak containers for 2 years or more. Straight Bourbon Whiskey may include mixtures of two or more Straight Bourbon Whiskies provided all of the whiskeys are produced in the same state. No additives can be introduced.
- Blended – Straight Whiskey or a blend of Straight Whiskey with neutral spirits. Lighter and less expensive than Straight; may include “coloring, flavoring or blending materials”.

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## American Whiskey:

- Wheat –produced at not exceeding 80% alcohol by volume (160 proof) from a fermented mash of not less than 51 percent wheat and stored at not more than 62.5% alcohol by volume (125 proof) in charred new oak containers.
- Rye – produced at not exceeding 80% alcohol by volume (160 proof) from a fermented mash of not less than 51 percent rye and stored at not more than 62.5% alcohol by volume (125 proof) in charred new oak containers.
- Malt – produced at not exceeding 80% alcohol by volume (160 proof) from a fermented mash of not less than 51 percent malted barley and stored at not more than 62.5% alcohol by volume (125 proof) in charred new oak containers.
- Corn –produced at not exceeding 80% alcohol by volume (160 proof) from a fermented mash of not less than 80 percent corn and if stored in oak containers stored at not more than 62.5% alcohol by volume (125 proof) in used or un-charred new oak containers and not subjected in any manner to treatment with charred wood.

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### American Whiskey:

- **Bottled-in-Bond** – Originated with an Act of Congress passed in 1897. The Bottled-in-Bond Act was a government move to protect consumers from inferior and often poisonous liquor. If a whiskey was Bottled-in-Bond, the government certified its quality and assured consumers that the product met exacting standards, i.e., it is Straight Whiskey, the product of one distillation season and one distiller at one distillery. The whiskey must be 100 proof and aged in a federally bonded warehouse under U.S. government supervision for at least four years. In short, Bottled-in-Bond was a hallmark of quality. No additives can be introduced.
- **Single Barrel Bourbon** – There is no blending of barrels to achieve a desired style, no combining whiskeys to balance differing characteristics for the sake of consistency or mass production. The Master Distiller selects the “honey barrels” that meet his expectations for nose and palate, and each barrel is individually bottled “as is” to offer an exquisite taste experience. No additives can be introduced.

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### American Whiskey:

- **Small Batch Bourbon** – Periodically, Master Distiller’s will select a limited number of barrels (typically, no more than 50-75) from specific middle floor locations in the rick-house that have matured to his high standards. These barrels will be mingled in limited quantities, and bottled as exceptional examples of the Bourbon-making craft. No additives can be introduced.
- **Tennessee** – This Straight Whiskey must be distilled in Tennessee from a fermented mash containing at least 51% corn, with new charred oak barrels used during maturation. Tennessee Whiskey is a product made by Tennessee distillers and processed in a manner similar to Bourbon. However, Tennessee Whiskey is mellowed through maple charcoal prior to maturing which gives it its distinctive flavor. Tennessee distillers make their own charcoal by slowly burning 1.8-m lengths of hard maple wood. During the burning process the wood is periodically wet down to cause it to char rather than disintegrate into ashes. The charcoal is pulverized and packed into tanks and the new whiskey is allowed to mellow through the charcoal before maturation. This adds an extra smoothness character to the whiskey. The barrels can only be used once, then discarded. No additives can be introduced.  
All Tennessee Whiskey is Whiskey, but not all Whiskey is Tennessee Whiskey.

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### American Whiskey Tasting:

Rules of tasting whiskey:

1. It’s your opinion that counts
2. A whiskey tasting is NOT a wine tasting
3. Never taste just one whiskey
4. Tasting is NOT the same as drinking

Tasting whiskey- Lightest to Heaviest, Not Youngest to Oldest.

- Taste whiskey neat
- Record your impressions
- Don’t drain your glass
- Keep your glasses in order

How to taste whiskey

- Note the whiskey’s color
  - Nose the whiskey
  - Taste the whiskey, noting the flavor, the body (“mouthfeel”) and the finish
- Taste the whiskey again, diluting if desired

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## American Whiskey Tasting Example #1:

American whiskey	Comments / Thoughts
Jack Daniel's "Single Barrel" Tennessee Whiskey, 94p - Jack Daniel Distillery Lynchburg, Tennessee	
Maker's Mark "46" Bourbon, 94p - (Maker's Mark Distillery) Loretto, Kentucky	
Red River "Single Barrel" Bourbon, 96.8p - (JEM Beverage Co.) Pilot Point, Texas	
Four Roses "Single Barrel" Bourbon, 100p - (Four Roses Distillery) Lawrenceburg, Kentucky	
Woodford Reserve "Double Oaked" Bourbon, 90.4p - (Woodford Reserve Distillery) Versailles, Kentucky	
Old Forester 12 year "Birthday Bourbon", 97p - (Brown-Forman Distillers Company) Louisville, Kentucky	
Henry McKenna 10 Year "Single Barrel" Bourbon, 100p - (Heaven Hill Distillery) Bardstown and Louisville, Kentucky	
Knob Creek "Small Batch" Rye, 100p - (Jim Beam	

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## American Whiskey Tasting Example #2:

American Whiskey	Comments / Thoughts
Bernheim 7 Year "Small Batch" Wheat Whiskey. Est. 1934 after prohibition, 90p. (Heaven Hill Distillery) Bardstown, Kentucky.	
Old Rip Van Winkle 10 year Bourbon. ORWV was Est. before Prohibition, 107p. (Old Rip Van Winkle Distillery - Buffalo Trace Distillery) Frankfort, Kentucky.	
Blanton's "Single Barrel" Bourbon. Introduced in 1984, 93p. Blanton's Distilling Company - Buffalo Trace Distillery Frankfort, Kentucky.	
Elijah Craig "Small Batch" Bourbon. Est. Approx. 1789, 94p. Heaven Hill Distillery) Bardstown, Kentucky.	
Henry McKenna 10 year "Single Barrel" - Bottled in Bond" bourbon. Est. 1855, 100p. (Heaven Hill Distillery) Bardstown and Louisville, Kentucky.	
Balcones Baby Blue Corn Whiskey. Est. 2008, 92p. (Balcones Distillery) Waco, Texas. First Texas Whiskey introduced into the market since prohibition.	
Ironroot Republic Promethean Bourbon. Est. 2014, 103p - (Lukarish Enterprises Inc) Denison, Texas	
Sazerac Rye. Introduced in 2000, 90p. (Buffalo Trace Distillery) Frankfort, Kentucky. Sazerac is named after the Sazerac Coffee	

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Thank You for Attending "A Journey Through America: Understanding American Whiskey"




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