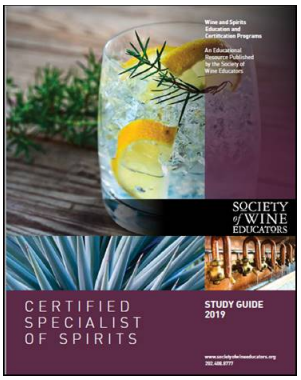

Addendum regarding: The 2019 Certified Specialist of Spirits Study Guide, as published by the Society of Wine Educators

Note: This document outlines the substantive changes to the 2019 Study Guide as compared to the 2018 version of the CSW Study Guide. All page numbers reference the 2018 version. Please note that all of the tables concerning top-selling brands of particular classes of spirits have been updated to reflect 2018 statistics.

In addition, the maps of Scotland and Cognac have been updated. The new maps are available on SWE's blog, Wine, Wit, and Wisdom, at the following address: http://winewitandwisdomswe.com/wine-spirits-maps/cssspirits-maps/

Page 30: in the first paragraph in the section on the "History of Vodka," the last sentence has been revised to read as follows: It is believed that in the fourteenth century, the diminutive form of the word—*vodka*, interpreted as *little water*—began to be used in reference to the spirit.

Page : In the section under the heading "Distillation," the last sentence has been revised so that it reads as follows: Most vodka is produced using column still distillation, but the possibilities include a range of methods such as hybrid stills, a combination of pot still and column still distillation, or even multiple alembic distillations.

Page 35: In table 3.2 (vodka by typical base ingredient) the entry for "Hangar 1" has been deleted.

Page 55: The following information has been added to the "Definition of Whiskey" for the United States: According to the *Beverage Alcohol Manual—a Practical Guide to Basic Mandatory Labeling Information for Distilled Spirits* (as published by the TTB of the United States), a specific age statement is required on the label of any whiskey that is less than four years old.

Page 57: In the section under the heading "Mashing," the following was added: The vessel used in this step is referred to as a *mash cooker* in the United States and a *mash tun* or *lauter tun* in Europe.

Page 57: In the section under the heading "Washing," the following was added: This is often done in as many as four stages, with the term *sparging* used to refer to the final stage (or stages). The liquid from these final stages—the *sparge*—is sometimes retained for use in the next round of mashing rather than being passed on to the fermentation stage.

Page 63: The following was added to the bullet points: Note: Speyside is technically a subregion of the Highlands and as such, whiskey produced in Speyside may use the Highland designation on the label.

Page 72: The following was added to the section on Bottling: Bourbon (with the exception of blended bourbon) is not allowed to contain caramel or other forms of coloring materials.

Page 73: The following was added to the section on Bourbon: Bourbon that has been produced and aged (for at least one year) in the state of Kentucky may be labeled as "Kentucky Bourbon."

Page 74: The following was added to the section on American Straight Whiskeys: While many styles of American whiskey are permitted to contain caramel coloring, all forms of straight whiskey (with the exception of blended straights, as discussed later in this chapter) are specifically excluded from the allowance and are therefore not allowed to contain colorings.

Page 75: The first bullet point under the heading "Bottled-in-Bond Whiskeys" was updated to read as follows: Be a product of one distillation season, defined as a sixth-month period from January to June or July to December

Page 75: The following section was added:
FLAVORED WHISKEY: Flavored spirits continue to be popular in the United States, and the whiskey category is no exception. US spirits regulations allow for the production of flavored whiskeys which may be bottled at a minimum of 30% abv (as is allowed in other spirit categories as well). Cinnamon-flavored whiskeys—such as Fireball (produced by the Sazerac Company), Jim Beam Kentucky Fire, and Jack Daniels Tennessee Fire—were among the first flavored products to be released and continue to be widely distributed. Other popular flavors include cherry, apple, blackberry, peach, maple, honey, and vanilla. Some flavored whiskey products contain sugar or liqueurs, or are themselves (technically) classified as liqueurs.

Page 92: The first sentence under the heading "The Region of Origin" was updated to read as follows: Brandy de Jerez has PGI (protected geographical indication) status and must be aged within the "Sherry Triangle" defined by the towns of Jerez de la Frontera, Sanlúcar de Barrameda, and El Puerto de Santa María.

Page 97: The section on Portugal was updated and expanded to read as follows:
Portugal: Many of Portugal's wine-producing regions also produce grape spirits—much of which is used to fortify Port wine. However, several areas have historically crafted brandy—known as *aguardente*—as a fine, aged spirit. The most well-known brandy of Portugal is undoubtedly *Aguardente de Vinho Lourinhã*, produced in the Oeste region of Portugal. The production area is located on the Atlantic coast about 40 miles (65 km) north/northwest of Lisbon. A number of grapes are permitted to be used in Aguardente de Vinho Lourinhã; however, the recommended varieties of Alicante, Alvadurão, Boal Espinho, Marquinhas, Malvasia Rei, Talia, and Cabinda are the most widely used. These grapes are made into a wine of no more than 10% alcohol by volume before being distilled in either a continuous still (to a maximum of 78% alcohol by volume), or a pot still (to a maximum of 72% alcohol by volume). The spirit is then aged in oak barrels for a minimum of twenty-four months before being blended and bottled. Aguardente de Vinho Lourinhã has had DOC status in the European Union since 1992.
The following Portuguese brandies have protected geographical indication (PGI) status through the EU:

- Aguardente de Vinho Alentejo
- Aguardente de Vinho Douro
- Aguardente de Vinho Ribatejo
- Aguardente de Vinho da Região dos Vinhos Verdes

Page 99: The following section was added:
Bagaceira: Portugal has its own version of pomace brandy, known as *aguardente bagaceira*—also referred to as *destilação do bagaço* or simply *bagaço*. Bagaceira is made throughout Portugal's wine producing areas, and several regions have earned protected geographical indication (PGI) status for their bagaceira. These include Aguardente Bagaceira Alentejo, Aguardente Bagaceira Bairrada, and

Aguardente Bagaceira da Região dos Vinhos Verdes. Portuguese bagaceira may be bottled as a clear, unaged (or briefly-aged) spirit; however, many of the finest versions are aged for at least two years in oak and labeled with the term *velha.*

Page 103: The section on soft fruit and mixed fruit brandy was updated and expanded to read as follows:
SOFT FRUIT AND MIXED FRUIT BRANDY: Berries and other soft fruits are sometimes used in the production of fruit-based distilled spirits. France produces eaux-de-vie from raspberries, known as *framboise*, and from strawberries, known as *fraise.* Producers elsewhere, such as Bonny Doon and St. George's Spirits, both located in California, are producing artisanal brandies from soft fruits.
Fruit spirits produced from a mixture of fruit—often containing apples, pears, apricots, cherries, plums, berries, or wild fruit—are known in the EU as *obstler* or *obstbrand*. These clear spirits are a traditional to Austria, Switzerland, and southern Germany—where they are often referred to as *schnaps*.

However, soft fruits such as strawberries and raspberries are low in sugar compared to most fruits; therefore, they are not always fermented into wine to be distilled into brandy. Rather, they can be macerated in neutral alcohol to impart their flavor, and the resulting infused liquid can then be distilled. In the European Union, this type of spirit may be referred to as *geist.* One well-known example is *himbeergeist*, a raspberry-infused spirit produced mainly in Germany and Austria. *Schwarzwälder Himbeergeist*—a clear spirit created by macerating fresh raspberries in neutral spirits for several weeks before diluting and distilling the mixture—has protected geographical indication (PGI) status as a product of Germany. Geist may also be produced using other flavorings such as flowers, vegetables, or spices. (Note: the term is a specific usage of the German noun *Geist*—which is often used in the philosophical context to refer to the "spirit/mind" or "intellect" of a person or thing.)

Page 110: The section on Jamaica was updated and expanded to read as follows:
Jamaica is well-known for its high-ester, pot still rums; however, the country produces many different styles of rum using a range of fermentation techniques, distillation styles, and aging processes as well as blending. Most distilleries in Jamaica produce a range of new make spirits, each according to a specific formula as to the base ingredients, length of fermentation, method of distillation, and resultant ester level. The formulas are known as marques (marks), and are registered with the Jamaica Spirits Pool Association.

A marque or finished rum is often classified by ester content, with each category equating to a certain flavor style. While many distilleries have their own naming system, the following traditional categories are still in use:

- **Common Cleans:** Products with the lowest level of esters are known as *common cleans*. These rums have light, floral aromas and may be produced using column still distillation. Common cleans typically contain an ester content between 80 and 150 parts per million (ppm).
- **Plummers:** Products with a medium ester level are known as *plummers*. This style of rum shows tropical fruit aromas and has a bit more structure. Plummers typically contain an ester content between 150 and 200 parts ppm.
- **Wedderburns:** Medium-high ester rums are known as *wedderburns* and are more aromatic—with a degree of pungency—as well as more flavorful, and more structured. Wedderburns typically contain an ester content of at least 200 ppm.
- **Continental Flavoreds:** This style of rum was once designated as such for export to the European markets, where they would be added to lighter spirits as a flavoring agent. These very high-ester products are the most aromatic and flavorful, often showing pungent "medicinal" aromas or (when diluted) aromas of tropical fruit. These products may contain ester levels of

between 500 and 1,600 ppm. Such rums are often added to rum blends in small amounts to add flavor and body. Despite their intense flavors they are often consumed "as is" in Jamaica, and some very-high-ester products, such as Rum Fire produced by Hampden Estate, have made their way into the export market. These rums are likely to be produced via a long, slow fermentation—which may last from 5 to 10 days.

Rum production in Jamaica is unique in that a substance called *dunder* is sometimes used in the production process. Dunder is comprised of the highly acidic, yeast-rich foam "leftovers" that remain in the still after distillation is complete (similar terms used for these leftovers in other types of distillation include *stillage* and *backset).* Dunder is often stored in wooden tanks for use in subsequent distillation runs, or it may be aged and concentrated in tubs or pits dug into the ground. These are known as *muck pits,* with the resultant bacteria- and ester-rich concentrate known as *muck*. Dunder or muck is typically added to the vat at some point during the fermentation process. *Skimmings*—the sugar- and mineral-rich froth residue created during the boiling and concentration of sugarcane juice—may also be re-used. Dunder, muck, and skimmings encourage the creation of the highly aromatic compounds known as *esters*—and are often used in the production of continental flavoreds and other high-ester rums.

Jamaica passed a set of regulations for use of the Jamaica Rum geographical indication in 2016. Under these laws, Jamaica Rum GI must be fermented and distilled in a defined area limited to those portions of the island located within the limestone aquifer water basins (which limits the allowed area to about 50% of the island). The laws allow for Jamaica Rum GI to be produced using sugarcane juice, sugarcane syrup, molasses, or cane sugar from any source; Jamaica-grown sugar is not required. There are no limits to the type of yeast used, nor are there specifications as to methods of fermentation or distillation. Jamaica Rum GI may be unaged, or it may be aged in small wooden barrels. However, the use of caramel coloring is not allowed, and—according to the country's excise duty tax laws—other additives and sweeteners are also disallowed without prior approval from a commissioner. Finally, all rum bearing the label term "Certified Geographical Indication" and "Jamaica Rum" must be tested and approved by the technical committee of the Jamaica Rum and Spirits Traders Association (JRASTA).

Jamaica prides itself on its traditional, high-ester-content pot still rums while producing a wide range of rum and rum products. Leading producers and brands of Jamaican rum include Appleton Estate (which can trace its documented rum production back to 1749), Myer's Rum, Coruba Rum, Hampden Estate, Long Pond Distillery, and Wray & Nephew.

Page 110: The second sentence of the first paragraph under the heading of "Martinique" has been updated as follows: The two main species of sugarcane approved for use are *Saccharum officinarum* and *Saccharum spontaneum*—hybrids of these two species are also allowed.

Page 110: In the first paragraph under the heading of "Martinique," the fourth sentence has been updated to read as follows: Fermentation must take place in open tanks. Once begun, fermentation must remain beneath the maximum allowed temperature of 38.5°C (101°F) and be completed within 120 hours.

Page 111: The section on “Trinidad and Tobago” has been updated and expanded to read as follows: The twin-island nation of Trinidad and Tobago is situated just 6.8 miles (11 km) off the northern coast of South America. The islands were colonized by a series of countries—including Spain, Britain, and France—and began to cultivate sugarcane and make rum from molasses in the 1700s. This small country once had close to 50 distilleries with a good deal of its rum used in blends destined for the British Navy and other navy-style rums. However, as government subsidies for the sugarcane industry waned, so did the production of the distilleries. By 1950, only a handful of distilleries remained.

The Caroni Distillery, established in 1918, operated at a near-full capacity producing an artisan style of rum until 2002. After its demise, the Caroni Distillery has become the stuff of legends and many rum aficionados mourn the loss of Caroni rum. However, some well-aged barrels have recently been uncovered and it is still possible (albeit rare) to find Caroni rum in the marketplace.

These days, on the island of Trinidad, Angostura Limited (better known for its world-famous bitters) produces a range of spirits—including Fernandes Black Label Rum and Angostura Single Barrel Reserve Rum. A portion of the base rum for Kraken Black Spiced Rum is also produced in Trinidad and Tobago. Some versions of Trinidad rum are produced in a traditional style known as puncheon rum—an overproof rum that may be as high as 75% abv.

Page 112: The following information was added to the section on Haiti: Haiti also produces a unique style of naturally-fermented, sugarcane juice- or sugarcane syrup-based rum known as *clairin* (based on the Haitian Creole word for “clear”). Clairin is a traditional product made by hundreds of tiny distilleries based all over the island and typically consumed locally. However, it has recently been made available in limited amounts in the United States and other markets. The term *clairin* is not legally defined; however, bottlers have created some standards for the use of the term. These include the use of sugarcane varieties native to Haiti (excluding hybrids), hand-harvesting, the use of natural yeast, and small-batch distillation. Clairin is typically bottled in Haiti at distillation proof—which averages around 50% abv—with no water or other additives added after distillation is complete.

Page 112: The section on Barbados was updated and expanded to read as follows: Barbados was colonized by the British in 1627 and began to grow sugar after much of its tobacco trade was usurped by the Americans. Rum production was a natural by-product, and Barbados rum quickly became a favorite of the British. It was also appreciated by early Americans— including George Washington—who reportedly ordered a barrel for his inauguration in 1789.

Barbados produces a wide variety of rum, mainly from molasses. Several local distilleries capitalize on the long history of rum production in the area by using traditional pot stills and oak aging, while others produce a range of products, including blended rum using a combination of pot and column still distillation. Barbados white rum is sometimes referred to as “Bajan see-through” (to use an old-fashioned term). Barbados is often called the “birthplace of rum” and while this may be difficult to prove conclusively, the island is home to Mount Gay, the world’s oldest documented rum brand—founded here in 1703.

Barbados is also home to the Foursquare Rum Distillery, opened in 1996 on the grounds of a former molasses and sugar plantation dating back some 350 years. Under its own label, the distillery produces a range of high-quality rum products including vintage releases, cask strength rums, ultra-aged versions, and "exceptional cask" selections that feature rum finished in a variety of specialty barrels—such as those that once held cognac, bourbon, Zinfandel wine, or port. In addition to the Foursquare brand, Foursquare Rum Distillery produces Doorly's Rum, Old Brigand Rum, and R. L. Seale Rum—in addition to "The Real McCoy" Rum named in honor of Bill McCoy, a famous rum runner of the Prohibition era.

Page 114: The following section was added:
Private Labels and Independent Rum Bottlers: Many of the rum products available for sale are either estate-bottled (produced and bottled by a specific distillery) or various "private label" (branded) products such as Gosling's or Pusser's. In addition, a range of rum products—many of them rare and some of them ultra-aged—are available via independent bottlers who purchase and bottle rum sourced from all over the world.

Independent rum bottlers can obtain their rum in a variety of ways, such as a purchase of rum directly from a distillery, the use of a rum broker, the purchase of private rum collections, or the acquisition of specific (often rare) casks or barrels. In some cases, an independent bottler will specialize in the *elevage* (aging, finishing, and blending) of rum. Many warehouse facilities associated with independent bottlers are located in Europe, allowing for the rum to be finished in a continental climate as opposed to—or in addition to—the tropical climate of many rum-producing countries.

Examples of independent rum bottlers include Habitation Velier (Genoa, Italy), Bristol Classic Rum (Bristol, England), Smith & Cross (London), and Plantation Rum (located in France and associated with Maison Ferrand Cognac). Many independent rum bottlers also deal in private label rum and other sprits—such as Scotch whisky, gin, brandy, and liqueurs.

Page 115: The following section was updated and expanded:
CATEGORIES OF RUM: Rum is a difficult spirit to categorize, as there are few classification-wide legal requirements beyond the sugarcane base. In addition, it is not uncommon for a given region or even an individual distillery to produce many different styles of rum. As such, there has yet to be a singular, widely-accepted method of classifying rum into neat categories. Instead, there are quite a few (sometimes overlapping, and sometime contradictory) ways to approach the taxonomy of rum—including geographical indications, historical associations, production methodology, or color. Each of these systems has its benefits and its limitations, as discussed below.

Geographical Indications for Rum
Many of the leading spirits of the world are clearly classified based on specific geographical indications and country- or region-specific rules. This is certainly the case for whiskey, which has a set of government-backed regulations for individual products such as Scotch whisky, Irish whiskey, Bourbon, Tennessee whiskey, and Canadian whisky (among others).

Rum has until quite recently been fairly devoid of such geographically-based rules and regulations, but there are exceptions. Martinique was awarded the first (and so far, only) *appellation d'origine controlee* designation (AOC) for rum in 1996. Other rum-producing localities have followed suit, including the following:

- Jamaica: Geographical Indication for Jamaica Rum (2016)

- Venezuela: *Denominación de Origen Ron de Venezuela* (2003)
- Cuba: *Denominación de Origen Protegida Cuba Ron* (2013)

Several other rum-producing areas have plans to legislate guidelines and regulations for their rums. This is a subject that will be interesting to watch in the future.

Classification Based on Color

Rum is generally produced in three different colors, which are somewhat aligned with a particular style.

- **White:** White rums are colorless and may be labeled as clear, crystal, blanco, silver, or plata. In terms of total volume of rum consumed worldwide, this color category is the most popular. White rum is usually a light style of rum that is unaged or lightly aged, made using column stills, and sometimes filtered to remove any color after a period of aging. Due to their clear color and lighter flavor profile, these rums are especially good for use in mixed drinks and cocktails. Puerto Rico is a leading producer of white rum.
- **Amber/Gold:** Also known as *oro*, the gold color category denotes some aging, as the color presumably comes from the time spent in a wooden barrel during the maturation process. As such, this style of rum is expected to have some richness and complexity. However, some distillers add caramel or molasses to white rum in order to produce an amber-hued rum that gives the impression of aging.
- **Dark:** Dark rums are presumably aged in charred oak barrels, some for as long as five to seven years or even longer. A smooth, rich mouthfeel and aromas of sweet spices and dried fruits—such as raisin, fig, clove, and cinnamon—are common in aged rums. However, as with gold rums, additives can mimic the effect of aging and artificially darken the color of rum. Deeply-hued versions of dark rum (which may be aged in heavily charred barrels) are sometimes referred to as "black rum."

Categories Based on Historical Associations

One system of rum classification is based on the historical European colonization—by France, Britain, and Spain—of portions of the Caribbean Basin and Central and South America. As such, certain rums may be described as British style, French style, or Spanish style, as described below:

- **French style**: French-style rums were originally modeled on traditional French brandies and produced using fermented sugarcane juice instead of molasses. These rums are characterized by fruity and floral notes. Guadeloupe, Haiti, Martinique, and Grenada are known for producing French-style rums.
- **British style:** British-style rum tends to be characteristically dark, rich, and heavy in style, with full body and pungent aroma. Jamaica, Guyana, Barbados, Trinidad and Tobago, and St. Lucia are considered to produce British-style rum.
- **Spanish style:** Based upon the traditional Cuban style of rum developed in the 1860s, the Spanish style tends to be lightest style of rum. Many are made in continuous column stills from highly purified distillates and are known for clean, floral, and delicate aromas. Producers of Spanish-style rum include Cuba, Puerto Rico, St. Croix, Guatemala, Dominican Republic, Nicaragua, Panama, Colombia, and Venezuela.

Categories Based on Production Methods

Like many spirits, rum is made using a wide range of production techniques to include methods of fermentation, distillation, aging, and blending. As such, rum is produced in a range of styles that often seem to transcend regions of origin and local traditions. For these reasons, many rum experts believe

that a meaningful classification system for rum would be based on these factors, and might include the following categories:

- Molasses-based, pot still distillation
- Molasses-based, column still distillation
- Molasses-based, blended
- Cane juice-based, pot still distillation
- Cane juice-based, column still distillation
- Cane juice-based, blended
- "Modern Rum," produced using multiple column still distillation

Each of these classifications could be further segmented based on one or more of the following:

- Length of aging
- Location of aging
- Barrel source and type
- Estate-bottled, private label, or independent bottler
- Type of fermentation (including such factors as commercial yeast versus wild yeast, temperature, length of time, use of dunder or other factors)
- Alcohol by volume
- Geographical indication or region of origin

The conversation regarding such classification systems for rum is complex and ongoing. Some of the leading contributors include Martin Cate of Smuggler's Cove, Luca Gargano of Habitation Velier, David Broom (author of "Rum: the Manual"), and Richard Seale of Foursquare Distillery.

Page 122: The information on mellowing agents was updated to read as follows: With the notable exception of *blanco* tequilas, tequila is allowed to be treated with "mellowing agents." These are defined as caramel coloring, natural oak or Encino oak extract, glycerin, and sugar syrup—and are permitted up to an allowed maximum of 76 g/L for sugar, or a total of all such materials of 1% by volume. Tequila that is treated with mellowing agents may be referred to as "mellowed" or *abocado*.

Page 125: The following information was added to the section on Hydrolysis: This conversion involves a process known as *hydrolysis*—the chemical breakdown of a compound due to a reaction with water—combined with prolonged exposure to moderate heat. During this process the inulin will be converted into fructose and glucose—highly fermentable simple sugars——along with a number of other congeners. The use of heat also assists with softening the piña, which permits it to be more easily milled later on.

Page 126: The following information was added: A third option called the *diffuser process* (diffusion) bypasses the initial cooking process altogether and mechanically shreds the piñas, permitting the raw extraction of inulin, which then goes through a heating and cooking process.

Page 135: The category of "Herbal" liqueurs was revised to read "Botanical" liqueurs

Page 142: the following information was added to the section on fruit liqueurs:
Triple Sec: The name *triple sec* is a generic term for orange-flavored liqueurs. The origins of the product (and term) remain somewhat debated; however, it is generally accepted that triple sec was first made in France, perhaps as a result of the sudden popularity of Dutch orange liqueurs in the 1800s.

In 1834, one of the earliest versions—known at the time as *Curaçao Triple Sec*—was produced at the Combier Distillery located in Saumur (France). As the story is told, the word *triple* referred to the three-stage, copper pot distillation process that was used. The word *sec* (French for "dry") may refer to either the fact that the orange peels use to flavor the liqueur were dried before distillation, or to the fact that triple sec was intended to be less sweet than other versions of orange liqueur. The Combier Distillery is still in operation and currently produces several versions of triple sec, including *L'Original Combier Liqueur d'Orange*—a proprietary product based on their original 1834 formula. These days, numerous distilleries produce their own versions of orange liqueur using the generic name *triple sec.* (Generic)

Curaçao: The term *curaçao* is also used as a generic term to refer to orange liqueur. Orange-flavored curaçao liqueur traces back to the 1500s and the Spanish colonization of the Caribbean island of Curaçao. The Spaniards planted Valencia Orange orchards on the island, despite the fact that the climate was not ideal for citrus. The trees managed to survive, however, and eventually adapted to their new environment while producing a small, bitter fruit with inedible flesh but highly fragrant peels. When the Dutch arrived on the island of Curaçao, they used their knowledge of distillation to turn this ungainly fruit into a delectable, sweet, style of orange-flavored liqueur. The oranges of Curaçao are now known as *Lahana Oranges,* or by the botanical name of *Citrus aurantium currassuviensis* (meaning "Golden Orange of Curaçao").

The term "curaçao" is not a geographical indication and versions of curaçao liqueur are produced all over the world. One firm, known as *Senior & Company*, founded on the island of Curaçao in 1896, was among the first local businesses to produce a liqueur from Lahana Oranges. They remain based on the island of Curaçao, and their products may be labeled as "the Genuine Curaçao Liqueur" or "Curaçao of Curaçao."

While typically clear, curaçao is available in a range of colors. Blue curaçao is particularly well-known for its role in brightly-hued cocktails such as the Blue Margarita and the Blue Hawaii. (Generic)

Mandarine Napoléon: Mandarine Napoléon is an orange and tangerine-flavored liqueur originally produced in Belgium. According to legend, the liqueur was created in the 1700s for Napoléon Bonaparte by Dr. Antoine-François de Fourcroy, the emperor's personal physician. Commercial production of the product dates back to 1892, when a Belgian chemist by the name of Louis Schmidt reportedly discovered the recipe for Napoléon's favorite drink in Dr. Fourcroy's diary.

Mandarine Napoléon is made with Sicilian and Corsican mandarins (tangerines) plus a proprietary blend of botanicals—believed to include clove, nutmeg, cinnamon, and cardamom as well as green and black tea. In the first step of production, these flavorings are macerated in a combination of spirits and water which is later distilled in copper pot stills. This flavored distillate is then aged, blended with cognac, sweetened, and finished to a typical bottling proof of 38% abv.

Page 142: the following was added to the section on Cointreau: Technically, Cointreau is a type of triple sec, and there are those that claim that Cointreau was the first company to use the term to refer to an orange liqueur. The word triple—in this version of the story—may refer to the third (and final) formula used in the recipe trials for Cointreau, or to the three different types of oranges used for flavoring.

Page 143: the second sentence under the heading “Crème Yvette” was revised to read as follows: It was originally produced in 1890 by the Sheffield Company of Connecticut. Later, it was purchased by Charles Jacquin et Cie and made in Philadelphia until 1969, after which it became unavailable for a while.

Page 144: The following was added to the section on botanical liqueurs:
Italicus Rosolio di Bergamotto: Italicus Rosolio di Bergamotto is a fairly new product, launched by Italian spirits specialist Giuseppe Gallo in 2016. The concept, however, is based on a very old product known as rosolio. Rosolio is a traditional Italian aperitivo flavored with rose petals that dates back to the 15th century. Rosolio was very popular with the Royal House of Savoy and was once produced all over Italy. However, with the passing of the generations (along with the rise and fall of nations), rosolio fell out of favor. Italicus Rosolio di Bergamotto, a modern re-interpretation of this historic product, incorporates a range of botanicals including bergamot orange, chamomile, lavender, cedro lemon (citron), and yellow roses. The result is a bittersweet liqueur with clean, floral-and-citrus flavors and a lingering finish. (Proprietary)

Page 144: The following was added to the section on bean, nut, and seed liqueurs:
Amaretto: *Amaretto* is a generic term for almond-flavored liqueurs. The earliest versions were produced in Saronno, Italy and flavored with bitter almonds. Modern versions are quite sweet and only slightly bitter, and are typically flavored with apricot pits, peach pits, almonds, or extracts. In many such cases, the chemical *benzaldehyde* provides the product’s almond-like flavor. Amaretto is popular served as a digestif, in coffee drinks such as the Café Amore, or in a range of cocktails such as the Amaretto Sour, the Godfather, and the Toasted Almond. (Generic)

Page 150: The following information was added to the definitions of vermouth: Under the laws of the United States, aromatized wines—including vermouth—are included in the classification of *aperitif wines*. According to the regulations that define vermouth and other aperitif wines, they must be:

- A product based on grape wine,
- fortified with brandy or other alcohol to a minimum alcoholic content of 15% by volume,
- flavored with herbs and other natural aromatic flavoring materials,
- produced with or without the addition of juice, concentrated juices, sugar, and/or caramel coloring.

Page 150: The section on the vermouths of Chambéry has been revised to read as follows:
Chambéry: Located in the French Alps, the city of Chambéry has a long and storied history. At one time, Chambéry had numerous producers of fortified and aromatized wines and was considered one of the centers of vermouth production. Today, however, only a few houses remain.

The House of Dolin, one of the original producers of Chambéry vermouth, pioneered the light, dry style of vermouth in France in 1832. This original product, Dolin Dry White Vermouth, is described as a clean, fresh, floral style of vermouth. Other products produced by Dolin include Dolin Blanc, a traditional herbal-focused style vermouth, and a full-bodied rouge/red vermouth that—while being somewhat drier than most red vermouths—is still quite sweet and has noticeable characteristics of bitter wormwood. In addition to vermouth, Dolin produces a wide range of assorted aperitif and digestif wines and spirits as well as a local favorite, *Chamberyzette,* which blends Dolin dry vermouth with the juice of wild strawberries.

Chambéry is also home to the *Distillerie des Alpes*, a producer of vermouth and liqueurs—some of which are based on formulas passed down from Philibert Routin, an herbalist who lived in Chambéry in the late 1800s. Routin vermouth products are based on white wine from Savoie, and include Routin Blanc (infused with a range of flavorings including vanilla, thyme, and elderflowers), Routin Dry (produced using 17 botanicals including bitter almonds, rosemary, and rose petals), and Routin Original Rouge, produced using Philibert Routin's original formula from 1883.

Page 152: The following information was added to the section on Vermouth di Torino: Giulio Cocchi was another of the earliest producers of Torino-style vermouth. He began making aromatized wines and sparkling wines in the town of Asti (about 30 miles/48 km southeast of Turin) in 1891. His distillery—and his and chain of Cocchi Tasting Bars located throughout Piedmont—were soon famous for their Barolo Chinato, Cocchi Aperitivo Americano, sparkling wines, and a range of vermouths. Today, known as Giulio Cocchi Spumanti Srl, the company creates a wide range of products, including grappa, sparkling wine, and amari. Their flagship products include Cocchi Storico Vermouth di Torino—a sweet, amber-hued vermouth produced from Giulio Cocchi's original, 120-year old recipe. The formula remains a closely-guarded secret, but it is reported to contain cocoa, rhubarb, citrus peel, and Moscato wine (in addition to Artemisia).

Page 152: The section on Spanish vermouth was updated and expanded to read as follows:
Spanish Vermouth: Spanish vermouths (known as *vermut* in some parts of Spain) are abundant but are generally not familiar to Americans, for the simple reason that, until quite recently, Spanish vermouths were not widely exported to the United States. However, vermouth is very popular in Spain, so much so that a gathering of friends (what Americans might call "happy hour") is often referred to as *fer el vermut* ("doing vermouth"). Spanish vermouth is routinely consumed on the rocks with a splash of soda water, and garnished with—perhaps—a wedge of orange or some green olives.

The Spanish are very supportive of their local vermouths, many of which are house-made in restaurants and bars. Catalonia—particularly the town of Reus—has been the epicenter of Spanish vermouth production for well over a century. Red vermouth is the main style produced; however, Spanish red vermouth tends to be somewhat lighter and less bitter than red (Torino-style) vermouth produced in Italy. A range of Spanish vermouths, featuring those that are best-known outside the country, are discussed below.

- **Perucchi:** Perucchi vermouth has been produced in the Catalonian town of Badalona (just north of Barcelona) since 1876. Perucchi produces a range of products including red (rojo), white (blanco), extra-dry, reservas, and special editions—all based on Spanish wines from Empordà, Valencia, and La Mancha. Perucchi vermouths, produced using over 50 specific botanicals, are often noted for their characteristic aromas of chamomile, ginger, lemon verbena, cinnamon, mint, and orange blossom.
- **Yzaguirre:** Bodegas Yzaguirre is located in the province of Tarragona in Catalonia, Spain. Begun in 1884, it produces a range of vermouths, including red, white, rosado (rosé), and reserva versions as well as special releases. Yzaguirre is a classic "mistela" vermouth, with some products made using a base of unfermented grape must (juice) fortified with spirits to arrest fermentation. Some versions are oak-aged and cited for a unique balsamic character.
- **Miró:** Vermouth Miró was founded in 1957 in Reus, a Catalonian city long-known for the production of vermouth. A range of Miró products are produced, including classic red and white

styles as well as extra dry, and reserva styles. Unique products, such as Miró & Paco Perez Red Fusion (a red vermouth with a touch of salinity) and a canned vermut with cola—*vermucola*—are made as well.

- **Casa Mariol:** Casa Mariol Vermut is made by the Vaquer family, producers of artisan Spanish wine and vermouth for over 100 years. The company, located in Tarragona (Catalonia), produces a range of products, but is especially known for Casa Mariol Vermut Negre (black vermouth). Vermut Negre is produced using a base of local white wine made from Macabeo (also known as Viura) grapes and fortified with grape neutral spirits. Over 160 botanicals are used as flavorings, including green walnuts, thyme, rosemary, orange peel, and cardamom. After the blend is completed, the vermouth spends up to six months in a solera-style oak-aging system.
- **Primitivo Quiles:** Primitivo Quiles vermouth, better known by its label as P. Quiles, is produced in the Alicante area of Spain's Valencian Community. Primitivo Quiles produces traditional "alpine style" vermouths in a bodega dating back to 1780. While most vermouth is made with white wine (gaining its color from the botanical ingredients), P. Quiles vermouth uses red wine based on the Mourvèdre grape variety. Because of this, it has a deep, natural coloration. Primitivo Quiles cites cinnamon, clove, ginger, and nutmeg as part of its proprietary formula of botanicals.
- **Lustau:** Recently, the area of Jerez (in Andalucía) has begun to revive the tradition of making vermouth based on sherry—the fortified wines of Jerez. Bodegas Lustau has created their own version—Vermut Lustau—described as a "premium red sherry vermouth." Vermut Lustau uses two kinds of well-aged sherry as its base—one sweet (Pedro Ximénez), and one dry (Amontillado). The resulting vermouth is lightly sweet with a noticeable sherry influence as well as aromas and flavors of dried fruit, orange peel, cinnamon, and herbs.

Page 155: The section on Lillet was expanded to include the following information: As of 2013, reserve versions of Lillet—intended to be able to improve over 15 to 20 years of proper bottle aging—were created, based on the more prestigious wines of Bordeaux. Two styles of Lillet Réserve are currently available, albeit in very small quantities: Réserve Jean de Lillet Blanc (based on Sauternes) and Réserve Jean de Lillet Rouge.

Page 157: the first paragraph under the heading "AMERICANO" was updated to read as follows: Americano is a category of aromatized, fortified wines flavored with wormwood and gentian. Gentian is a flowering plant that grows throughout Europe's mountainous regions including the Alps, the Pyrenees, the Vosges, and the Massif Central. Several varieties of gentian—including Gentiana lutea (yellow), Gentiana punctata ("spotted"), and Gentiana purpurea (purple)—are used in the production of flavored wines, spirits, and other beverages.

Page 160: The following information was added to the section on Italian amari:
Ramazzotti: Amaro Ramazzotti, based on a proprietary blend of 33 herbs, roots, and other botanicals, was originally created by Ausano Ramazzotti in 1815 in Milan—making it one of the oldest commercially-produced amari in Italy. In 1848, the first Ramazzotti bar was opened near the La Scala Opera House in Milan, where the locals would often drink Ramazzotti in place of coffee. Ramazzotti is dark brown in color with a strong herbal and spicy aroma (often compared to root beer, licorice, or chocolate) and a bittersweet flavor redolent of citrus zest, herbs, coffee, and spices. While the formula remains a closely-guarded secret, it is known to contain Sicilian orange peels, bitter oranges from Curaçao, star anise, clove, cardamom, galangal root, myrrh, cinchona, rhubarb, gentian root, and

caramel. Ramazzotti is often enjoyed as a digestivo, served either neat or on the rocks with a slice of lemon or orange.

Amaro Montenegro: Amaro Montenegro was first created by Stanislao Cobianchi in Bologna in 1885. Stanislao was an adventurer who traveled the world seeking out unique flavorings, and his amaro is said to contain botanicals from "the four corners of the world." The amaro is named in honor of Princess Elena Petrović-Njegoš of Montenegro, who would become the second queen of Italy several years after her 1896 marriage to Victor Emmanuel III of Italy. The overall flavor of Amaro Montenegro is complex, often described as slightly sweeter and less bitter than most amari. The formula remains undisclosed; however, the company does admit to its use of Artemisia, nutmeg, cloves, cinnamon, marjoram, oregano, coriander seeds, and oranges. The production process includes macerating, boiling, and distilling 40 component botanicals into a series of extracts designed to provide the following six aromatic notes: bitter and herbaceous, spicy and floral, sweet and roasted, fresh and balsamic, fruity and vegetal, and warm and tropical. A final ingredient—known as the *premio*—is produced from a secret blend of five botanicals and added at the end of the production process.

Page 165: The material on "Root" was deleted (as the product is no longer in production)

Page 165: The following information was added to the list of bittered spirits:
Margerum Amaro: Produced in Santa Barbara, California by winemaker Doug Margerum, Margerum Amaro is a product of the producer's lifelong love of Italian Amari. Margerum Amaro is based on late-harvest, red grape-based wine fortified with grape neutral spirits. The product is then infused with various botanical roots and barks along with dried orange peel and a range of herbs including sage, thyme, and lemon verbena. The Amaro is then barrel-aged in neutral 225-liter French oak barrels kept outdoors in order to achieve a unique level of complexity via maderization.

Page 174: The following new section was added:
COMPOUND SYRUPS: A range of compound (flavored) syrups are used in mixology in order to provide sweetness, flavor, color or texture to a drink. Such products are commercially produced and widely available—and many experienced bartenders will have a strong preference for a specific brand. However, recipes abound and some establishments prefer to craft their own. Making compound syrups in-house is an excellent way to preserve the flavor of highly perishable products such as fresh mint, basil, pineapple, raspberries, and raw ginger. Most compound syrups are non-alcoholic, but some versions do contain alcohol.

Examples of compound syrups used in mixology include the following:

- **Grenadine:** Grenadine is a non-alcoholic pomegranate-flavored syrup known as much for its bright-red color as its fruity flavor. The name is derived from the French word *grenade*, meaning "pomegranate." Some modern versions are flavored with black currants or other red or black fruits in addition to or in place of pomegranate. Grenadine is a standard component in many cocktails—including the Tequila Sunrise and the Jack Rose—and non-alcoholic drinks such as the Shirley Temple and the Roy Rogers as well.
- **Orgeat:** Orgeat is a non-alcoholic, almond-flavored syrup originally produced with a blend of almonds and barley. Modern versions often have a floral component as well, and may be flavored with rose water or orange flower water. Orgeat is featured in several tropical drink recipes, including the Mai Tai and the Scorpion.

- **Falernum:** The origins of falernum are debated, but most experts agree that this sweet, many-flavored syrup originated in Barbados. The recipes and subsequent character of falernum may vary, but typical versions are flavored with lime, almond, ginger, and cloves. Often used in Caribbean cocktails and other tropically-inspired drinks, falernum may be house-made or commercially-produced; and may or may not contain alcohol. One widely-distributed commercial product, Taylor's Velvet Falernum, is an alcoholic version based a recipe created in 1890 by John D. Taylor of Bridgeport, Barbados.
- **Lime Cordial:** Lime cordial is a very tart and concentrated non-alcoholic syrup flavored with lime. Lime cordial is often used as a substitute for fresh lime juice in mixology and cooking. A widely-distributed commercial product, Rose's Lime Juice, is featured in the recipe for the Gimlet and several other classic cocktails.
- **Ginger Syrup:** While commercial preparations exist, ginger syrup is easy to make and house-made versions provide an excellent vehicle to preserve the potent flavor of fresh ginger.

Page 180: The section on "Tropical Drinks" was updated to read as follows: Despite a rather outdated reputation for sweet, slushy drinks with elaborate garnishes (including edible flowers, pineapple chunks and paper umbrellas), tropical drinks are enjoying a modern revival. Contemporary tiki bars featuring authentic Polynesian artifacts and elevated drink recipes are all a part of the growing tiki culture—and, it seems, the collectable tiki mug is here to stay.