Addendum regarding:

The 2024 Certified Specialist of Wine Study Guide, as published by the Society of Wine Educators

This document outlines the substantive changes to the 2024 Study Guide as compared to the 2023 version of the CSW Study Guide. All page numbers reference the 2023 version.

Note: Many of our regional wine maps have been updated. The new maps are available on the member portal of the SWE website.



Zinfandel's long lineage has been a subject of much debate; so much so that it warranted a *Zinquest*—a joint research project led by Dr. Carole Meredith and her research team at UC Davis in collaboration with the University of Zagreb (Croatia). In 2001—after testing several hundred local grapes and vineyards—it was determined that Zinfandel is native to the Dalmatian Coast of Croatia, where it is known as *Tribidrag* or *Crljenak Kaštelanski*. It has also been determined that Zinfandel is genetically identical to *Primitivo* (grown in and around Puglia in Southern Italy) and *Kratosija* (as it is known in the Balkans).

Page 50: the section under the heading "During Fermentation" has been revised to contain the following information: As the temperature increases, the yeast cells become increasingly active, converting the sugar into alcohol at a faster pace and further raising the temperature. As such—for both stylistic and practical reasons—temperature control is often one of the most important tasks the winemaker faces during fermentation. The job is made much easier with modern technology which allows for remote monitoring of temperature levels and effective cooling capabilities through the use of refrigerated jackets, coils, or panels. Before such technology existed, winemakers had to rely on chilly fall weather conditions or work in underground wine cellars to keep the fermentation vessels cool—and these nontechnical methods are still in use today.

At elevated temperatures, the fresh fruit and floral essences of white grapes can disappear, lending a more neutral character to the wine or even introducing "cooked fruit" aromas more akin to apple sauce than fresh apples. If the temperature remains uncontrolled and rises to (approximately) 100°F (38°C) or higher, the yeast is likely to expire.

High temperatures, a sudden change in temperature, a lack of nutrients, or other forms of yeast stress may cause a "stuck fermentation" in which fermentation slows or even stops prematurely. While slow fermentations can sometimes successfully bubble away for several weeks (or even longer), this does entail some risk of spoilage or contamination. While a stuck fermentation can be difficult to reverse, there are several methods—such as adding yeast or yeast nutrients or adjusting the temperature—that may be used to restart a stuck fermentation.



Page 53: the section under the heading "Oak Aging" (for white wines) has been revised to include the following information: Depending on the type, style, and age of the barrel, oak aging may impart a range of aromas—such as wood, oak, vanilla, coconut, caramel, toast, smoke, and butterscotch in addition to wood-derived tannin—to the wine.

Page 56: the section under the heading "Oak Aging" (for red wines) has been revised to include the following information: Aging in barrels can be very beneficial for red wines, particularly those high in tannin. The slow infusion of oxygen that seeps through the wood and into the wine helps the tannin molecules combine with each other in a process called polymerization. These long, polymerized tannins feel softer and richer in the mouth compared to the shorter, harder type of tannins found in grapes. Depending on the type, style, and age of the barrel—as well as other factors such as the cellar environment and the length of time spent in the vessel—oak aging can impart a range of aromas to red wine. These may include vanilla, coconut, toast, tobacco, dill, wood (oak, cedar, sandalwood), or spice (clove, nutmeg, cinnamon)—among others. When properly balanced with the fruit and other sensory components of the wine, oak aging can add substantial complexity to the finished product.

Page 57: the section titled "Variations in Oak Barrels" (fourth bullet point) has been revised to o read as follows: Barrels are typically formed by hand over an open fire, which softens the wood enough to bend it into shape. The amount of toast imparted to the inside of the staves and barrel heads (the circular end pieces) will affect the aromas, flavors, and other characteristics imparted by the barrel.

Page 61: the section on Orange Wines was updated to read as follows:

AMBER (ORANGE) WINES: The tradition of amber wine (sometimes referred to as *orange wine*) is thought to have originated in the country of Georgia—perhaps as long as eight thousand years ago. In the production of amber wines, juice from white grapes is allowed to macerate with along the grape skins, seeds, and (sometimes) stems for a period of time. This enables the extraction of some tannin as well as color and helps to achieve some oxidative resistance. Depending upon the winemaker's preference, skin contact may last for as short as three days or as long as several weeks or months. As a result, these wines develop a coppery hue—sometimes described as *amber* or *orange*.

Page 81: the introductory paragraph under the heading "World Wine Production" has been updated to include the following information: Of the total volume of wine produced throughout the world in 2023, it is approximated that 64% was produced in Europe, 10% in South America, 11% in North America, 6% in Asia, 5% in Oceania, and 4% in Africa.

Page 89: the information on the IGP/Vin de Pays regions of France has been updated to include the following information: The next tier in the pyramid—formerly known as *vin de pays* (country wine)—accounts for just over one-third of all French wine production. These wines may be labeled with the name of the appellation followed by the term *Indication Géographique Protégée* (IGP), with the traditional phrase *vin de pays*, or by using a combination, as in *IGP–Vin de Pays*. Each of these appellations typically allows for the production of several different styles of wine and the use of a range of grape varieties. Aside from these standards (and the legal boundaries of wine production), there are few legal restrictions on these wines. However, it is required that at least 85% of the grapes must be grown within the boundaries of the delimited region.

In recent years, there has been a great deal of change and consolidation in the IGP regions of France, but as of December 2023, there were a total of 76 IGP/vin de pay designations. The most prolific of these include the Pays d'Oc IGP (covering the western part of the French Mediterranean coast, including Languedoc and Roussillon), the Méditerranée IGP (covering southeast France, including parts of the Rhône Valley as well as Provence and Corsica), and the Comté Tolosan IGP (covering southwest France).

Page 91: the information on grapes allowed in the wines of Bordeaux has been updated to include the following information: In April of 2021, six new grape varieties—including four red grapes (Arinarnoa, Castets, Marselan, and Touriga Nacional), and two white grapes (Albariño and Liliorila)—were approved for limited use in the wines of the Bordeaux and Bordeaux Supérieur AOCs. Other appellations—including the Médoc, Haut-Médoc, and Listrac-Médoc AOCs—have approved some of these varieties as well, and several other appellations are in the process of doing so. The inclusion of these grape varieties represents an effort to lessen the long-term effects of climate change on the wine industry of Bordeaux.

Page 93: the section on Entre-deux-Mers has been updated to read as follows: Entre-Deux-Mers—the large, triangular-shaped area between the Garonne and Dordogne Rivers—is more fertile than other parts of Bordeaux, so its wines tend to lack the concentration of those from either bank. The Entre-Deux-Mers AOC has historically been focused solely on the production of white wines. However, the regulations were updated in 2023 and the Entre-Deux-Mers AOC is now approved for the production of dry white as well as dry red wine. The Entre-Deux-Mers AOC contains a well-known sub-region—Haut-Benauge—tucked along its western edge that is approved for dry white wines only. (Note: Haut-Benauge is also considered to be a sub-region of the Bordeaux AOC and wines labeled as "Bordeaux-Haut Benauge AOC" may be produced in either the dry white or sweet white styles.)

The *area between the two rivers* also contains several other appellations, each with their own specific regulations. Three appellations—Loupiac AOC, Sainte-Croix-du-Mont AOC, and Cadillac AOC—are clustered along the eastern shore of the Garonne River and approved solely for the production of sweet white wines (which may or may not be affected by botrytis).

Despite the historic emphasis on white wines, the vineyards of the Entre-Deux-Mers area contain significant plantings of red grapes (primarily Merlot and Cabernet Sauvignon). Some of these grapes are made into wine destined to be labeled as Entre-Deux-Mers AOC, Bordeaux AOC, or Bordeaux Supérieur AOC. However, the area does contain a few smaller appellations—including Graves de Vayres AOC and Sainte Foy-Côtes de Bordeaux AOC, both located along the banks of the Dordogne—that are approved for the production of red wines (in addition to white).

Page 102: the section on the grape varieties of Champagne has been updated to include the following information: Champagne is almost always made from one or more of the three main permitted grape varieties: Chardonnay, Pinot Noir, and Meunier (Pinot Meunier). The region also allows for the use of a few other grape varieties: Pinot Blanc, Pinot Gris, Petit Meslier, Arbane, and Voltis. Voltis—a white grape approved for limited use in 2022—is unique in that it is an interspecific hybrid grape variety chosen for its disease-resistance and ability to withstand potential climate change.

Pages 126-127: the information regarding the DOCGs of Italy has been updated to reflect the fact that Italy now has 77 DOCGs, and one new DOCG has been approved for Piedmont (Canelli DOCG), making a total of 19 DOCGs in Piedmont.

Page 133: The following entry was added: Canelli DOCG: In 2023, the Canelli region (formerly a sub-zone of the Asti DOCG) was approved as Piedmont's newest DOCG. The Canelli DOCG is approved for slightly sparkling (frizzante) wines produced using Moscato Bianco grapes (similar in style to Moscato d'Asti).

Page 145: the entry for "Toro" has been updated to read as follows: Named for the town of Toro, the Toro DO is primarily known for powerful red wines based on Tempranillo (locally known as *Tinta de Toro*). The area is also planted to small amounts of Garnacha (used in some red wines, but primarily vinified into rosé). An even smaller percentage of white grapes—most notably Malvasía Castellana, Verdejo, Moscatel de Grano Menudo (Muscat à Petit Grains), and Albillo Real—are planted as well. The Toro DO is located on a high plateau between two mountain ranges, with most vineyards planted at altitudes of 2,000 to 2,800 feet (600–800 m) above sea level.

Page 149: the paragraph regarding the grapes used in Sherry has been updated to to read as follows: Palomino (specifically the sub-varieties Palomino Fino and Palomino de Jerez) is the most widely planted grape of the region and the sole or majority grape variety used in most of the wines of Jerez. Two other established grapes—Pedro Ximénez (often shortened to PX) and Moscatel (Muscat of Alexandria)—are grown in much smaller amounts and primarily used to produce dried-grape dessert wines. In 2022, the regulations were revised to allow the use of three additional varieties—Beba, Perruno, and Vigiriega due to their historic significance in the region.

Page 149: the first paragraph under the heading "Sherry Wine Styles" has been updated to read as follows: Sherry is produced in a wide range of styles from light and dry to rich and sweet and is found in a range of colors from pale yellow, tan, and brown to nearly black. The two basic styles of Sherry–*fino* and *oloroso*—are produced from Palomino grapes using a base wine that is fermented to dryness before it enters the solera. Once in the solera system—where the aging and blending process occurs—the wine will be transformed to one of the many styles of finished sherry. In addition, a small amount of Sherry is produced using partially-dried Pedro Ximénez or Moscatel grapes; these wines are typically sweet.

Page 150: the following has been added as a new section in the section on Sherry: MANZANILLA— Manzanilla Sherries are produced under the rules of the Manzanilla Sanlúcar de Barrameda DO. While this appellation is considered separate from the Jerez-Xérès-Sherry DO, the two share a single *consejo regulador* and both are considered producers of Sherry (as expressed in the English language). Palomino is the only grape allowed for use in Manzanilla. The grapes may be grown anywhere within the confines of larger Jerez-Xérès-Sherry DO; however, aging must be carried within the confines of the Manzanilla Sanlúcar de Barrameda appellation.

The unique climate of the town of Sanlúcar de Barrameda—located at the mouth of the Guadalquivir River—allows for the formation of a uniquely thick blanket of flor on the surface of the wine while it rests in the solera. Manzanilla is often described as having a chamomile-like aroma and—in some cases—a saline or briny character. While Manzanilla is aged under a veil of flor, recent regulatory updates prohibit it from being labeled with the term *fino* (rather, it is simply *Manzanilla*).

Page 151: table 11-2 (Styles of Sherry) has been updated, and the entry regarding "Fino" now reads as follows: Fino Sherry is pale-in-color and made to show the unmistakable characteristics of—flor yeast (biological) aging. Unless deliberately sweetened, fino Sherries are dry on the palate.

Style	Туре	Notes
Manzanilla	Manzanilla	Sherry that is matured in the seaside town of Sanlúcar
		de Barrameda and produced according to the rules of
		the Manzanilla Sanlúcar de Barrameda DO.
	Manzanilla Pasada	Manzanilla with a minimum of seven years of solera
		aging. During this extended aging, the layer of flor may
		weaken, allowing the wine to develop a distinct oxidative
		character.

Page 151: table 11-2 (Styles of Sherry) has been updated to include the following sections:

Page 151: table 11-2 (Styles of Sherry) has been updated, and the entry regarding "Palo Cortado" now reads as follows: This unique Sherry is made from fino-quality base wine, but never develops flor to any significant extent. Rather, it continues aging oxidatively, and typically shows the nutty characteristics of an amontillado along with the color and fuller body of an oloroso.

Page 151: table 11-2 (Styles of Sherry) has been updated, and the entry regarding "Moscatel" now reads as follows: These wines are made from grapes that are left to dry for a short time after harvest and made into a sweet, golden wine with fruity and floral aromas.

Page 173: the section under the heading "Grape Varieties and Styles" has been updated to include the following information: Acidity is the hallmark of Riesling, and Mosel Riesling exemplifies this trait. In cool vintages the Mosel can produce dry, low-alcohol (typically 8% to 10 % abv) Riesling—often described as delicate and pure—showing aromas of green apple, citrus, white flowers, and a haunting minerality. Richer wines—as are produced via sunnier plots or warmer years—may contain a moderate amount of sweetness as well as aromas of stone fruit, yellow pear, honey, and candlewax.

Page 180: the information on the DAC designation of Austria has been updated to read as follows: The DAC designation is reserved for use with highly specific wines produced using the grape varieties considered the highest quality and most typical of each delineated region. Each DAC's regulations may indicate requirements such as alcohol levels, viticultural practices, aging regimens, and other details. Quality tiers, such as those designated as *Klassik, Reserve*, or regional specificity including village and single-vineyard wine (known as *Rieden*) are used by some DACs. In addition, the country is in the process of implementing the use of the terms *Grosse Lage* (grand cru) or *Erste Lage* (premier cru) for certain designated vineyards. Other types and styles of wine (in addition to those defined by the rules of the DAC) may be produced within these delineated areas; however, such wines must be labeled with a more generic designation.

Page 180: the bullet points for the following regions of Austria have been updated to read as follows:

- Kamptal DAC: The Kamptal (*Kamp Valley*) DAC is centered on the south-flowing Kamp River, along the final stretch of its journey before it joins the Danube. The steep terraces lining the gorge-like river valleys are home to some of the most revered Riesling sites in Austria, known for producing powerful, mineral-driven wines with good aging potential. The Kamptal DAC also produces a typically flavorful version of Grüner Veltliner. Kamptal—along with Langenlois, the main town of the area—is a historic, important center of wine culture and an ideal home base for wine tourism.
- Kremstal DAC: Situated around the historic city of Krems and straddling the Danube River, the Kremstal (*Krems Valley*) DAC is a bit more exposed to the warming breezes blowing in from the Pannonian Plain than the surrounding areas. As such, the Kremstal DAC is known for its rich,

structured, and flavorful wines made from Grüner Veltliner or Riesling. Vineyards located within the Kremstal region also produce high-quality Chardonnay, Pinot Noir, and Zweigelt (among others); however, these wines do not qualify under the Kremstal DAC and are typically labeled with the Niederösterreich PDO.

- Traisental DAC: The Traisental (*Traisen Valley*) DAC is one of the smaller producers of Austria (in terms of volume) as well as one of the youngest (commercial viticulture began here in the 1990s). The area's finest vineyards are planted on the rolling hills and terraces along the banks of the Traisen River. Grüner Veltliner—planted in nearly 60% of the region's vineyards and known to produce well-structured wine with a fresh, fruity, and spicy character—is the dominant grape in the area, followed by Riesling.
- Wachau DAC: The Wachau DAC, located in a steep valley following the path of the Danube River, is one of Austria's most historic and respected wine regions. The area grows a range of grape varieties; however, the top-tier wines of the DAC must be produced with grapes grown in designated, single-vineyard sites (Rieden) and are made exclusively from Riesling and Grüner Veltliner. The soils of the Wachau—including wind-blown, glacier-carved loess atop crystalline/gneiss bedrock—and centuries-old stone terrace walls help to create the region's unique viticultural landscape.
- Thermenregion DAC: Located south of Vienna and quite a distance from the moderating influence of the Danube River, the Thermenregion DAC stretches along the hillsides of the *Wienerwald* (Vienna Woods). The northern portion of the area is mainly planted to white grapes such as Pinot Blanc and Chardonnay, with a special focus on indigenous varieties such as Zierfandler (also known as Spätrot) and Rotgipfler. Further south, red varieties dominate the landscape; leading red grapes include St. Laurent, Pinot Noir, and Zweigelt.

Page 198: the list of bullet points regarding American Wine History has been updated so that it reads as follows:

- Nicholas Longworth (1783–1863): founder of one of the first successful commercial wineries in the US (1830s); produced one of the first sparkling wines in America (using grapes—mainly Catawba—grown in the Ohio River Valley)
- John Patchett (1797–1876): founder of the first commercial vineyard and winery in Napa County (est. 1852); hired Charles Krug (1825–1892) who went on to open Napa's Charles Krug Winery in 1861.
- Agoston Haraszthy (1812–1869): Hungarian immigrant and early California wine producer; introduced many European vines to California; founded Sonoma's Buena Vista Winery (1857)
- Konstantin Frank (1899-1985) Ukrainian-born viticulturist and New York winemaker who championed the planting of vinifera grapes in the Eastern United States
- André Tchelistcheff (1901–1994): Russian-born California winemaker who introduced many modern wine production techniques to the US; noted for shaping the style (and eventual reputation) of California Cabernet Sauvignon; known as the "dean of American winemakers"
- Frank Schoonmaker (1905–1976): wine journalist/wine merchant who promoted the concept of varietal labeling in the United States (as opposed to the widespread use of semi-generic labels such as "California Burgundy") and as such helped to define American wine; considered (along with Alexis Lichine) one of the most influential wine journalists of the 40s, 50s, and 60s
- Ernest Gallo (1909–2007) and Julio Gallo (1910–1993): brothers who founded E & J Gallo—a vineyard and bonded winery—in 1933; almost singlehandedly responsible for ensuring the consistent supply of reasonably priced wine in post-Prohibition America; co-founders of one of the largest wine companies in the world

- Robert Mondavi (1913–2008): founder of Robert Mondavi Winery (Napa, 1966), one of the first post-prohibition wineries to be established in California; instrumental in crafting consumer recognition of quality wine made in California (and, by extension, the rest of the US)
- Bob Trinchero (b. 1936): creator of white Zinfandel (1972)—a white wine made from red Zinfandel grapes; given its commercial success, white Zinfandel is credited with saving many of California's oldest Zinfandel vines from being abandoned or uprooted; son of Mario Trinchero (co-founder of Sutter Home Winery)
- Steven Spurrier (1941–2021): British wine merchant and organizer of the 1976 Paris Tasting (the success of which is credited with changing the course of American wine history)

Page 198: the information regarding the number of AVAs in the US has been updated to read as follows: As of December 2023, 269 distinct AVAs had been approved in over 30 different states; of these, 149 are in California (and these numbers are sure to increase in the future).

Page 205: the information regarding the number of AVAs in California has been updated to read as follows: As of December 2023, California has 149 AVAs.

Page 206: the information on Napa County has been updated to include the following information: Grapes have been cultivated in Napa since the 1830s, with the first commercial wineries established by the 1860s. Napa County is now home to more than 500 wineries. At 45,000 acres (18,200 ha), Napa is one of the leading California counties in terms of wine grape acreage planted, along with Sonoma, Monterey, and San Joaquin County. However, as vineyard yields are typically kept low, the county's wine production is just 4% of the state total by volume.

Page 212: the information regarding Lake County has been updated to include the following information: Cabernet Sauvignon is the most widely planted grape in Lake County, followed closely by Sauvignon Blanc. Merlot, Zinfandel, and Chardonnay are also represented. Lake County currently has nine designated AVAs:

- Benmore Valley AVA
- Big Valley District–Lake County AVA
- Clear Lake AVA
- Guenoc Valley AVA
- High Valley AVA
- Kelsey Bench–Lake County AVA
- Long Valley-Lake County AVA
- Red Hills–Lake County AVA
- Upper Lake Valley AVA

Page 214: the information on California's Central Valley has been expanded to include the following information: California's Central Valley—encompassing the Sacramento Valley in the north and the San Joaquin Valley in the south—is a huge expanse of fertile land tucked between the Coast Range and the Sierra Nevada Mountains. A large percentage of California's total grape acreage is planted here, amid major plantings of other agricultural crops. Much of the Central Valley's grape crop goes into juice and raisin production, but a growing percentage is made into wine. Of the grapes grown for wine, the majority are destined to make bulk wine; however, the area can produce excellent grapes (and fine wine) as well.

Page 220: the information on the Finger Lakes has been expanded to include the following information: Prior to the 1960s, viticulture in and around the Finger Lakes was almost entirely focused on native North American grapes—including *Vitis labrusca* and *Vitis aestivalis*—as well as hybrids. However, this began to change with the arrival of Dr. Konstantin Frank, a Ukrainian-born viticulturist and the founder of Dr. Konstantin Frank Wine Cellars—originally known as *Vinifera Wine Cellars* and located on the shores of Keuka Lake in Hammondsport, New York. Dr. Frank believed that European vines could survive the region's cold climate and—beginning in 1958—planted some of the first successful vinifera vines in the Eastern United States, igniting what is now known as New York's "Vinifera Revolution." These days, wineries in the Finger Lakes produce a range of crisp, light-bodied wines using cool-climate vinifera varieties in addition to Native North American grapes and hybrids, including Concord (which thrives throughout the northeastern United States), Vidal, Seyval Blanc, Cayuga, Baco Noir, and Catawba.

Page 227: the entry for La Rioja (Argentina) has been updated to include the following information: The region is planted 51% to red grapes, including Cabernet Sauvignon, Malbec, Bonarda Argentina, and Syrah.

Page 227: the entry for San Juan has been updated to include the following information: Syrah, Malbec, Bonarda Argentina, and Cabernet Sauvignon are the leading red varieties.

Page 227: the entry for Mendoza bas been updated to include the following information: Over 61% of Mendoza's 372,500 acres (150,760 ha) of vines are planted to red grapes, led by Malbec, Bonarda Argentina, Cabernet Sauvignon, Syrah, and Tempranillo.

Pages 234 - 235: the section on Brazil has been updated to read as follows: Brazil is the largest country in South America in terms of landmass, and currently ranks third in terms of wine production. Brazil has traditionally had hundreds of small, family-owned wineries producing light, fruit-driven wine for local consumption. However, in recent years, Brazilian wine has seen significant growth, improvement, and increasing investments in vinifera-based vineyards and modern winery facilities. As a result, more and more Brazilian wineries are producing high-quality wine for export.

Beginning in 2002, Brazil has awarded geographical indications for wine production. The system grants both *Denominação de Origem* (DO, the highest classification) and *Indicação de Procedência* (IP) status to certain areas. There are currently only a few regions so designated; however, this is sure to change in the future. Brazil's wine appellation structure is somewhat unique in the world beyond Europe, as specific regulations as to grape varieties, wine styles, and viticultural/production methods are often included in the appellation guidelines.

Modern wine production in Brazil is centered around the southern reaches of the country, with a majority of vineyards located in the state of Rio Grande do Sul. This area—extending roughly from the 29th to the 32nd parallel and close to Uruguay and Argentina—has a mostly temperate climate and some high elevation vineyards. However, small-scale vineyards are planted—and wine is produced—in the equatorial areas of the country as well. The leading wine-producing regions of Brazil include the following:

• Serra Gaúcha: Located in the state of Río Grande do Sul, the Serra Gaúcha (*Gaucho Highlands*) area is considered to be the cradle of Brazilian wine production. An influx of immigrants from Italy and Germany—beginning in the 1870s—helped establish the wine industry in the region, and it is currently responsible for large majority of the country's wine. While Serra Gaúcha is largely focused on red wine, its white wine and sparkling wines (both traditional method and

tank method) are increasing in quality and reputation. Leading red grapes of the region include Merlot, Cabernet Sauvignon, Cabernet Franc, and Tannat. Sparkling wines are typically produced using Chardonnay, Pinot Noir, Graševina (Riesling Italico), Malvasía, and/or Muscat. Several appellations with Indicação de Procedência (IP) status—including Altos Montes, Monte Belo, and Farroupilha—are located within Serra Gaúcha.

- Vale dos Vinhedos DO: Located within the state of Rio Grande do Sul, Vale dos Vinhedos was Brazil's first Denominação de Origem/DO (promoted from IP status in 2012). The area covers 32 square miles (82 square km) to the west and south of the city of Bento Gonçalves, a popular center for wine tourism. The DO regulations require the use of vinifera grapes. Authorized varieties for red wine include Merlot, Cabernet Sauvignon, Cabernet Franc, and Tannat; white wines may be produced using Chardonnay or Graševina (Riesling Italico). Traditional method sparkling wines based on Chardonnay, Pinot Noir, and Graševina (Riesling Italico) are another specialty of the region.
- Altos de Pinto Bandeira DO: Registered in 2022, the Altos de Pinto Bandeira DO is approved for the production of traditional method sparkling wine only. Only three grape varieties— Chardonnay, Pinot Noir, and Graševina (Riesling Italico)—are permitted. The Altos de Pinto Bandeira DO is located within the state of Rio Grande do Sul, with vineyards planted among the rolling hills and small mountains south of the Rio das Antas (River Antas).
- **Campanha Gaúcha IP:** This small area, also located in the state of Río Grande do Sul and situated on Brazil's southern edge, occupies a thin strip of land that stretches along the border with Uruguay for close to 210 miles/330 km. This area is home to some of the oldest vineyards in Brazil. The warm climate of the area combined with soils of mainly granite and limestone make this an ideal region for ripening sturdy red grapes such as Cabernet Sauvignon, Tempranillo, and Tannat. The Campanha Gaúcha IP is the second largest producing area in Brazil in terms of volume (after Serra Gaúcha).
- Serra do Sudeste: Viticulture is fairly new to this area—it was introduced in the early 1970s with large-scale plantings beginning in 2001. Serra do Sudeste is better known for vineyards than wine production, as most grapes grown in this area are transported to wine making facilities in Serra Gaúcha. Serra do Sudeste is located within the state of Río Grande do Sul (to the east of Campanha Gaúcha and close to the border with Uruguay).
- **Campos de Cima da Serra:** This region, also within the state of Río Grande do Sul, is located directly to the north/northwest of Serra Gaúcha. The area has a relatively cool climate and long growing season and is planted mainly to Cabernet Sauvignon, Cabernet Franc, and Tannat as well as aromatic white grapes such as Riesling, Pinot Gris, and Gewurztraminer.
- Vinhos de Altitude de Santa Catarina IP: This area is located to the north of Río Grande do Sul in the state of Santa Caterina. Vineyards must be planted at a minimum elevation of 2,755 feet/840 meters above sea level. This area contains some of the highest-elevation plantings in the country, with some reaching as high as 4,600 feet (1,400 meters). Leading grape varieties include Cabernet Sauvignon, Merlot, Pinot Noir, Chardonnay, and Sauvignon Blanc.
- Vale do São Francisco IP: The Vale do São Francisco (Valley of Saint Francis) is located in the northeastern part of Brazil in the states of Bahia and Pernambugo. The vineyards in this equatorial region are located as far north as the 9th parallel—some 1,500 miles/2,400 km north of the state of Rio Grande do Sul. With a climate classified as tropical semiarid, viticulture in this area is challenging and made possible in a large part due to the irrigation from the waters of the Rio São Francisco (São Francisco River) and the Sobradinho Reservoir. The region produces single-variety wines and red blends, along with traditional and tank method sparkling wines.

Page 246: the information under the heading "New Zealand Wine Laws" has been updated to read as follows: New Zealand's Geographical Indications (Wine and Spirits) Registration Act of 2006 was passed and entered into force as of July 2017. At this time, three regions—New Zealand, South Island, and North Island—were designated as "enduring geographical indications." Over the next several years, 11 geographical indications and 9 sub-zones—known as *local geographical indications*—were brought into force (and these numbers are sure to increase in the future). In addition, quite a few unofficial designations are widely accepted for informal and informational use. (See table 18-2 for more details.) Apart from the enduring GIs, New Zealand's official geographical indications will need to be renewed after the first five years, and every ten years thereafter.