



VALKYRIE CRAFTED LIBATIONS

How To Understand and Enjoy Fortified Wine

Plus the Amazing Story of How The Next Generation of Fortified Wine, Valkyrie Geistwein, Was Created

By
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Valkyrie Crafted Libations is a Premium Producer of Fortified Geistwein on Seneca Lake, NY
Written in 2023

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ACKNOWLEDGEMENTS

This E-book 'How To Understand and Enjoy Fortified Wine' is dedicated to the spirit of curiosity in all of us. That spirit of curiosity led the authors on a journey of discovery of Fortified wine and we hope to share our enjoyment of Fortified wine and educate the reader about this storied category of beverages. Many Thanks to the many who have been with us on this journey, especially Brenda Peterman, co-owner of Valkyrie Crafted Libations, and Michael Gaugler, Business Consultant, who have worked tirelessly in order to form Valkyrie Crafted Libations into a Premium Producer of Fortified Geistwein.

DISCLAIMER

This E-book is written as an introductory primer on Fortified wine. The authors have done their best to provide information from sources deemed credible and any factual errors are unintentional and no warranty of information is implied with the writing of this E-book. All information was obtained from public sources and this E-book is provided as a free resource for education, with no commercial gain from the publication of this E-book.

ABOUT THE AUTHORS

Steve Jeremias and Rob Lane have been friends for over 40 years and, even though both Steve and Rob ended up in the Finance industry for their "real jobs", with Steve working in Wall Street and Rob in Banking and Finance, both were enamored with the world of science and music as kids growing up. In fact, Steve's explosive experiments with hydrogen in his parent's garage did not make his parents happy at all, and Rob's mother, after enduring endless questions about how things work, finally bought him the entire series of Tell Me Why books to shut him up. So, curiosity was ingrained in both at an early age.

Combine that with their artistic pursuits, with both growing up as musicians, with Steve on piano and Rob on guitar, and you have creative spirit personified in these two. In fact, Steve and Rob, at the age of fourteen, and with the help of

friends John Skovron, Dave Nailor, and George Eutz, formed a successful rock band named Crimson in their hometown of Lewisberry, Pennsylvania. So how did that lead them to the wine business?

As Steve and Rob got older, went their separate ways at times, regrouped, and helped each other through many existential crises, they both took a greater interest in learning about the artistry behind fine beer, wine and liquor. Both started making wine on a hobby level. Steve, in his many travels for his Wall Street job, got the chance to taste and enjoy some of the finest wines and spirits from around the world and developed an interest in their production. Rob discovered the Finger Lakes area as a burgeoning wine region in the early 2000's, bought property in the region to spend weekends there, and started writing about the developing Finger Lakes wine industry in 2005 on his Finger Lakes Weekend Wino website, tasting over 800 Finger Lakes wines per year and writing about the winemakers.

Then in 2009, after winning a medal in a Wine Competition and, with the encouragement of some Finger Lakes winemakers, Rob partnered with Tom Day to open a winery in Pennsylvania. Steve came in as a Business Consultant and, together they started to develop a new kind of Fortified wine. That winery was dissolved in 2018 and Steve bought property on Seneca Lake to further develop their idea for a new kind of Fortified wine, and Valkyrie Crafted Libations was created. Over the last 10 years, Steve and Rob have experimented with every aspect of the Fortified wine process and have come up with what they believe to be significant innovations to make Premium balanced Fortified wines with multi-layered aromatic and flavor components. But more on Valkyrie Geistwein later.

First, they will take you through the amazing history of Fortified wine and showcase how to better understand and enjoy Fortified wine.

INTRODUCTION

Welcome to the world of Fortified wines, a fascinating category of delicious libations. This E-book is meant as an introduction to this historic category of beverages. The authors, Steve Jeremias, owner of Valkyrie Crafted Libations, and Rob Lane, winemaker of Valkyrie Crafted Libations, have always been experimenters and inventors at heart, and Valkyrie Crafted Libations was created to showcase a new generation of Fortified wine that they have spent the last 10 years creating through experimental trials. But we will get to that later. We sincerely hope that you enjoy this journey through the delicious world of Fortified wine.

CHAPTER 1 - WHAT IS FORTIFIED WINE?



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The origin of the word ‘fortified’ gives us our first clue. The word ‘fortified’ comes from the Latin *fortificare* meaning ‘to strengthen’. So, in general, Fortified wine is wine that has had a distilled spirit added to it during the winemaking process in order to boost, or strengthen, its alcohol content. Fortified wines are usually between 15% and 22% alcohol, while regular wines usually only contain 5% to 15% alcohol.

The basic process for making Fortified wine involves producing a base wine by fermenting grapes and then adding distilled spirits, generally grape brandy. Winemakers control how dry or sweet the Fortified wine is by adding the distilled spirits at different stages of the process and by adding sweeteners like honey at different stages. In general, adding the spirit before fermentation is complete creates a sweet Fortified wine; adding the spirit after fermentation is complete creates a dry Fortified wine.

HOW TO UNDERSTAND & ENJOY FORTIFIED WINE

To understand why this happens, it's necessary to be familiar with the fermentation process. Wine fermentation occurs when yeast breaks down sugar molecules in grapes and produces ethyl alcohol. Adding a spirit mid-fermentation increases the alcohol level to a high enough level where the yeast cannot survive and results in a sweeter fortified wine due to the larger amount of residual sugar left behind. If fermentation ends before the spirit is added, the yeast is able to break down a higher percentage of sugar content, resulting in a drier and less sweet Fortified wine.

Next, we will explore the history of distilled spirits, an essential component, and then the reasons why wine was fortified in the history of Fortified wine.

CHAPTER 2 - HISTORY OF DISTILLED SPIRITS



Picture of an Alembic Still from Medieval manuscript: Public Source Image

To understand the history of Fortified wine, it is also important to have a basic understanding of distillation and its history, since distilled spirits are essential to Fortified wine, so let's start there. The process of distillation (from the Latin 'destillare' for 'drip or trickle down") is the separation of a liquid by evaporation and condensation. The simplest example of this is when steam from a kettle becomes deposited as drops of distilled water on a cold surface. Distillation is used to separate liquids from non-volatile solids, as in the separation of alcoholic liquors from fermented materials, or in the separation of two or more liquids having different boiling points, as in the separation of gasoline, kerosene and lubricating oil from crude oil. Other industrial applications of distillation include the desalination of seawater.

HOW TO UNDERSTAND & ENJOY FORTIFIED WINE

Distillation is an age-old process which may have begun as early as 2000 B.C. Some experts say that the first use of distillation occurred in China, Egypt, or Mesopotamia for medicinal purposes, as well as to create balms, essences, and perfumes. About 1810 B.C. in Mesopotamia, the perfumery of King Zimrilim employed this method to make hundreds of liters of balms, essences and incense from cedar, cypress, ginger and myrrh every month. These were used to embalm the dead and for spiritual, medicinal and cosmetic purposes. As for distilled beverages, there is evidence of crudely distilled alcoholic beverages, liquors made from things like rice and mare's milk in Asia as far back as 800 B.C.

The earliest recorded wine distilling recipe is traced by some scholars to Anaxilaus of Thessaly, who was a physician and philosopher in Rome in the 1st century B.C. The recipe consists of sea-foam (salt) that has been heated in an earthenware wine-jar with new wine. The recipe states *When this has been boiled, if you apply a burning lamp to it, seizing the fire it sets itself alight, and if poured upon the head it does not burn at all.* "Boiled" was the Greek term for distilling, and salt was a common ingredient in medieval distilling recipes, for it raises the boiling point of wine by a few degrees.

Knowledge of distilling found its way to Ancient Greece and continued into the first century A.D. Writings in the 4th century A.D. also attribute the development of the tribikos, or three-armed pot still, to "Maria the Jewess," the first documented Western alchemist. But it wasn't until the 8th century A.D. that Arabic alchemist Abu Musa Jabir ibn Hayyan designed the alembic pot still, a design that allowed for the effective distillation of alcohol, not for alcoholic beverages, but for tinctures for burial rituals.

All of the earliest alcohol beverage distillations were most likely isolated and surely not commercially available, without the appropriate equipment and processes for controlling the temperatures in the process, which would be the key to commercial distilling. It wasn't until the 12th century A.D. that the Salernitan School of Medicine in Italy created instructions for commercially producing distilled wine for consumption, mainly for medicinal purposes.

So, we know that distillation of wine to make grape brandy was taking place commercially by the 12th century A.D., which brings us to the history of Fortified wine.

CHAPTER 3 - THE HISTORY OF FORTIFIED WINE



Historic boat transporting Fortified wine: Public Source Image

When we speak of Fortified wines in this E-book, we mean wines that are fortified with distilled spirits. Some texts speak of ancient wines that were “fortified” with herbs for medicinal and ceremonial purposes. In fact, new archaeological research suggests that the ancient Egyptians infused wine with herbal medicines as early as 3150 B.C. But the story of Fortified wine using distilled spirits starts a bit later.

When exactly the first Fortified wines made with distilled spirits were made is still up for debate, but the discovery of adding distilled spirits to wine to stop fermentation and retain sugar content for sweetness is credited, in 1285, to Arnaldus de Villaneuve, a French physician to Princes and Popes of the day. Villaneuve called this process Mutage, meaning “to mute”. The French fortified wine called Vins Doux Naturels resulted from the discovery of Mutage and is one of the oldest known Fortified wines. The Fortified wine of Cyprus called Commandaria, made from sun-dried grapes, also traces its fortified lineage to the 13th century and was fortified with the local distilled spirit called Zivania.

Following the discovery of the Mutage process, Fortified wines started to be developed throughout Europe, with each region using base wines from its own indigenous grapes and fortifying these base wines with distilled spirits, usually grape brandy. But it wasn't until the 1600's that Fortified wine began being commercially produced on a large scale, and Trade and the Shipping industry were the main reasons.

The story of Port wine, the now well-known Fortified wine made in Portugal, describes how Fortified wine became an essential and historic part of the wine

industry. First, some political history of the times. In 1386 the Treaty of Windsor had established a close political, military and commercial alliance between England and Portugal. Under the terms of the treaty, each country gave the merchants of the other the right to reside in its territory and trade on equal terms with its own subjects. Strong and active trading links developed between the two countries and many English merchants settled in Portugal. By the second half of the 15th century a significant amount of Portuguese wine was being exported to England, often in exchange for salt cod known in Portuguese as bacalhau.

The Anglo-Portuguese commercial treaty of 1654 created new opportunities for English and Scottish merchants living in Portugal, allowing them special privileges and preferential customs duties. The merchants imported commodities such as wool and cotton cloth from England and exported grain, fruit, oil and what was known as 'red Portugal', a light, acidic wine produced nearby in the Minho region of Portugal.

A decade later, several events happened to escalate the exports of Portuguese wine to England. In 1667, the French established a series of measures to restrict the import of English goods into France. This provoked Charles II of England into increasing the duty on French wines and later forbidding their import altogether, obliging the English wine trade to seek alternative sources of supply.

The opportunity was seized by the English merchants in Portugal who began to concentrate their efforts on the rapidly growing wine business. They realized that the thin, astringent and often unstable wines made in the temperate and humid coastal climate of the Minho region of Portugal were not to the liking of the English consumer. They began to look inland to the more robust, full-bodied wines from the steep and rocky hillsides of the upper Douro Valley of Portugal.

The long distance and mountainous terrain meant that the Douro wines could not be transported overland but had to be shipped down the River Douro by boat to the city of Oporto near the coast. From Oporto, ships would then carry them to England, sailing out into the Atlantic over the treacherous mouth of the Douro River.

In order to develop their business in the wines of the Douro, the merchants had to establish themselves in Oporto and by the early 1700's, most of them had done so. One of the early pioneers of the trade in Douro wine was Peter Bearsley, son

of the founder of Taylor Fladgate, who was said to be the first English wine merchant to make the hazardous journey into the upper reaches of the Douro Valley in search of the best wine.

Although they came from the mountainous land of the Douro Valley far from the coast, these wines took the name of the city Oporto from where they were shipped, becoming known in Portuguese as Vinho do Porto, meaning 'Oporto wine', and in English as 'Port'. The earliest recorded shipment of wine under this name took place in 1678.

To protect the wine during the long sea voyage it was sometimes 'fortified' prior to shipment with the addition of a small amount of grape spirit, or brandy, which increased its strength and prevented it from spoiling. However, the technique of adding a small proportion of brandy to keep the wine from spoiling during shipment should not be confused with the process, now an essential part of the making of Port, of adding brandy to the wine to stop fermentation to retain sugars and produce a sweeter wine. As we shall see, this latter method of fortification was only universally adopted much later. In this early period, much of the wine being exported was likely not fortified at all.

The 1720's marked the start of thirty years of rapid growth in shipments of Port wine and a period of great prosperity for both the producers in the Douro Valley and the Port wine shippers in Oporto. However, as time passed, this rapid growth in demand gradually gave rise to speculation in the trade and fraudulent practices such as the addition of elderberry, known as *baga*, to inferior wines to give them color and the illusion of quality. Further complications arose in the 1750s, which saw a sharp fall in demand and overproduction in the Douro Valley. To clean up the industry, Portugal established strict rules on the production of Port wine.

The second half of the eighteenth century was a significant period in the history of Port and saw the start of several developments which would transform Port into the great Fortified wine that we know today. Foremost among these was fortification. In the early days, as we have seen, brandy was sometimes added to wines at the time of shipment to protect them against spoilage from the hazards of the sea voyage. However, as stated earlier, the practice of adding brandy to the wine before it had finished fermenting was not widely followed in the early part of the 18th century. As the century progressed though, it became more common

as it was found to result in wines that were sweeter, stronger, more aromatic and of greater appeal to the English consumer.

However, not all merchants encouraged the practice, and it was not until well into the 19th century that this method of fortification became widely adopted. Nevertheless, it gradually gained acceptance. The prosperity of the last years of the 18th century released the capital necessary to accumulate stocks of wine and mature them for longer. The superior ageing potential of Port wines that had been fortified became apparent. The turning point is sometimes said to have been the exceptional harvest of 1820 which produced Ports so magnificent that subsequent vintages could not approach their richness, taste, and power. In any event, fortification had become widespread by the 1840s and by 1850 was universal.

The last years of the 18th century witnessed another important development which was to have a decisive influence on Port and its emergence as a great classic wine. This was the evolution in the shape of the glass bottle. Early 18th century bottles were bulbous, broad-bottomed and short-necked. They could stand upright but could not be laid on their sides. Their main purpose was to carry wine from the taverner's cask to the table and, once empty, they would be sent back to be re-filled. A bottle often bore the initials or crest of its owner.

Over the decades, as production techniques evolved, bottles became progressively slimmer and more elongated, with longer less-tapered necks. By the 1770s, bottles had become sufficiently cylindrical to be stored on their sides, which kept the corks from drying out, and allowed wines to age. This evolution in bottle shape led to the emergence of Vintage Port, wine of a single year which could be stored and aged in the cellar. According to some historians the first Vintage Port was made in 1775, predating the first bottled vintage Bordeaux, the Château-Lafite 1787, by twelve years.

Next, we will describe the different types of Fortified wine, including Valkyrie Geistwein, the Next Generation of Fortified Wine.

CHAPTER 4 – TYPES OF FORTIFIED WINE



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There are many types of Fortified wine made in the world, but the following are the most popular.

Port: Port wine is arguably the most popular Fortified wine in the world. As we discussed in the previous chapter, Port wine hails from Portugal, and specifically, the Douro Valley. Grapes must be grown and processed in the region, and to become Port, the wine is fortified with unaged brandy before fermentation is complete to yield a product with around 20 percent alcohol. Port is most commonly rich and sweet, but a range of styles exist, including tawny port, ruby port, white port and rose' port, amongst others.

The trade name 'Port' has been trademarked and may only be legally used by Port wines that are made in Portugal. Wineries in many other countries including the U.S. make Port-style wines, but they are called by other names such as Dessert wines or Aperitif wines.

Sherry: The Fortified wine Sherry originated in Spain, and it was the Moors from North Africa who invaded Spain in the 8th century, that introduced the technology required to fortify wine. Although there is evidence of wine making occurring in Spain as far back as 1100 B.C., it was only when introduced to the process of distillation that local producers were able to create fortified wines and brandies.

The names 'Sherry' and 'Jerez' both come from the Arabic transliteration 'Sherish', which was the name of the town where the drink was first produced in Spain. By the 16th century, Spanish Jerez was widely considered the finest wine available throughout Europe and the Europeans pronounced Jerez as Sherry. It

was also at this time that the drink's ongoing relationship with the United Kingdom first began.

Notoriously, upon conquering the southern Spanish town of Cádiz in 1587, Sir Francis Drake of England brought back nearly 3,000 barrels of Sherry to England with him, creating something of a taste for the drink among his countrymen. Today the name 'Sherry' is exclusively reserved for fortified wines produced between Jerez de la Frontera, Sanlúcar de Barrameda, and El Puerto de Santa María, in the Cádiz province of Spain.

A distinguished and venerable wine, Sherry is a product of the region's limestone-rich, chalky soil (albariza), its native grapes, particularly Palomino and Pedro Ximénez, and a unique vinification process. Essential is the action of flor, mildew-like yeasts encouraged by a slight exposure to air after fermentation, which imparts the characteristic nutty flavor.

The process of blending wines for Sherry involves what is known as the Solera system, which mixes wines of several vintages. This method matures the younger wines, freshens the older wines, and helps maintain the consistency, or historical continuity, of a type. A solera consists of from three to eight tiers of barrels in which Sherries of various ages are held, the oldest on the bottom.

As wine is drawn off the lowest level for blending, it is replaced by wine from the next oldest vintage, directly above; the second tier in turn is refilled with younger wines from the third tier, and so on. The date on a Sherry bottle or label refers to the year the solera for that Sherry was begun. All Sherry is fortified after fermentation with high-proof brandy, to about 16 to 18 percent alcohol, depending upon type.

The main styles of Sherries, listed from driest and palest to sweetest and darkest are Fino, Manzanilla, Amontillado, Oloroso, Cream, and Pedro Ximénez. The paler, usually drier, Sherries are made chiefly from Palomino grapes, and the sweeter, richer Sherries from Pedro Ximénez and sometimes Muscat grapes.

Madeira: Madeira hails from Portugal's Madeira Islands. The wine can range from dry to sweet, and is most notable for its unique aging process, where the wine is

heated and cooled in cycles, which gives Madeira wine its unique flavors of spices, roasted nuts, and dried fruits.

This unique aging process was basically discovered by accident when barrels of the Fortified wine were packed deep in the hulls of ships and sent out to various ports of call. During these lengthy sea voyages, the wine would heat up and cool down in the belly of the ship. In time, it was found that the heating and cooling of these wines evolved them in such a way as to create a very unique flavor. Today, the heating and cooling process is precisely controlled by the winemakers.

The roots of Madeira's wine industry date back to the Age of Exploration, when Madeira was a regular port of call for ships travelling to the East Indies. By the 16th century, records indicate that a well-established wine industry on the island supplied these ships with wine for the long voyages across the sea. The earliest examples of Madeira were unfortified and had the habit of spoiling at sea. However, following the example of Port, a small amount of distilled alcohol made from cane sugar was added to stabilize the wine by boosting the alcohol content.

The intense heat in the holds of the ships had a transforming effect on the wine, as discovered by Madeira producers when one shipment was returned back to the island after a long trip. The customer was found to prefer the taste of this style of wine, and Madeira labeled as *vinho da roda* (wines that have made a round trip) became very popular. Madeira producers, though, found that ageing the wine on long sea voyages was too costly, so they began to develop methods on the island to produce the same aged and heated style. They began storing the wines on trestles at the winery or in special rooms known as *estufas*, where the heat of the island sun would age the wine.

The 18th century was the "golden age" for Madeira. The wine's popularity extended from the American colonies and Brazil in the New World to Great Britain, Russia, and Northern Africa. The American colonies, in particular, were enthusiastic customers, consuming much of the wine produced on the island each year.

Madeira was a very important wine in the history of the United States of America. No wine-quality grapes were grown among the thirteen colonies, so imports were needed, with a great focus on Madeira. One of the major events on the road to the American Revolution in which Madeira played a key role was the British

seizure of John Hancock's sloop Liberty in 1768. Hancock's boat was seized after he had unloaded a cargo of Madeira, and a dispute arose over import duties. The seizure of the Liberty caused riots to erupt among the people of Boston.

Madeira was a favorite of Thomas Jefferson, and it was used to toast the Declaration of Independence. George Washington, Alexander Hamilton, Benjamin Franklin and John Adams are also said to have appreciated the qualities of Madeira. The wine was mentioned in Benjamin Franklin's autobiography. On one occasion, Adams wrote to his wife, Abigail, of the great quantities of Madeira he consumed while a Massachusetts delegate to the Continental Congress. A bottle of Madeira was used by visiting Captain James Sever to christen the USS Constitution in 1797. Chief Justice John Marshall was also known to appreciate Madeira, as were his cohorts on the early U.S. Supreme Court. Madeira and walnuts were often served together as a last course at dinner parties in Washington D.C. in the early decades of the 1800s.

Marsala: Marsala originated from the city of Marsala, on the Italian island of Sicily. The wine is classified by age, color, and sweetness levels, as measured by grams of residual sugar per liter. Alcohol content ranges from 15 to 20 percent alcohol, and styles run from dry to sweet.

Marsala fortified wine was probably first popularized outside Sicily by the English trader John Woodhouse. In 1773, he landed at the port of Marsala and discovered the local wine produced in the region, which was aged in wooden casks and tasted similar to Spanish and Portuguese fortified wines then popular in England. Fortified Marsala was, and is, made using a process called In Perpetuum, which is similar to the Solera system used to produce Sherry in Jerez, Spain.

Woodhouse recognized that the In Perpetuum process raised the alcohol level and alcoholic taste of this wine while also preserving these characteristics during long-distance sea travel. Woodhouse further believed that fortified Marsala would be popular in England. Marsala indeed proved so successful that Woodhouse returned to Sicily and, in 1796, began its mass production and commercialization.

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Marsala is produced using the Grillo, Inzolia, Catarratto and Damaschino white grape varieties, among others. Marsala wines are classified according to their color, sweetness, and duration of their ageing:

Fine is aged at least one year

Superiore is aged at least two years

Superiore Riserva is aged at least four years

Vergine is aged at least five years

Soleras Riserva is aged at least ten years.

Marsala wine was traditionally served as an aperitif between the first and second courses of a meal, and was often served with Parmesan, Gorgonzola, Roquefort, and other spicy cheeses, with fruits or pastries, or as a dessert wine with sweet desserts.

Marsala wine is also frequently used in cooking. A typical savory Marsala sauce, for example, involves reducing the wine almost to a syrup with onions or shallots, then adding mushrooms and herbs. One of the most popular Marsala recipes is chicken marsala, in which flour-coated pounded chicken breast halves are braised in a mixture of Marsala, butter, olive oil, mushrooms, and spices.

Commandaria: Commandaria hails from Cyprus and is predominately a sweet dessert wine made with sun-dried grapes, which concentrates the sugars in the grapes. It's made with only two types of grapes, Xynisteri and Mavro, which are indigenous to the island. Some archaeological experts say that Commandaria wine may have a history of production stretching back nearly 5,000 years, which would make it the oldest named wine in the world, though it was likely not fortified with distilled spirits until the 14th century. Maximum alcohol content is 20 percent alcohol, and the wine's taste is highly rich, sweet, and fruity, with predominant flavors of caramel, coffee, dried fruits and spices.

It is produced in the fertile high-altitude volcanic slopes in the south-west of the island that became known as "La Grande Commanderie" during the Crusades. Throughout the following centuries, stories of the wine abound. According to

legend, King Richard the Lionheart of England was so taken with Commandaria that at his wedding he pronounced it “the wine of kings and the king of wines.” Equally struck by the intoxicating liquor was the French King Philippe Augustus who is said to have declared it to be “the Apostle of wines”.

Vins Doux Naturels (VDN): As we mentioned in Chapter 3, The History of Fortified Wine, French physician Arnaldus de Villaneuve, invented the wine fortification process called Mutage in 1285, which led the French to start producing VDN. VDN’s are predominately produced in the Roussillon and Languedoc regions of France, using primarily Grenache and Muscat grapes, producing primary flavors of citrus, dried fruits, and nuts. One type of VDN is produced by exposing the wine to oxygen and heat outside, for a period of time, in large open-air tanks. This oxidative process is thought to make VDN’s that can withstand longer ageing.

The non-oxidative VDN’s made from Muscat grapes are sweet, but not sugary, at 8 to 10 percent residual sugar. They are fruity, floral and lively with notes of stone fruits, candied citrus, white flowers with a hint of honeysuckle. They are a lovely accompaniment to a cheese course or a light dessert, or dessert itself.

The oxidative-style VDN’s are a reddish or amber colored wine made principally from Grenache grapes. It is elegant and easy to sip, thanks to its intoxicating aromas and flavors of dried fruits, coffee, mocha, tea, nuts and dried orange peels. They pair with chocolate or chocolate-based desserts or those featuring dried fruits. For a sweet/salty pairing, try VDN’s with blue cheese or other strong, salty cheeses.

Vermouth: Vermouth is actually classified as an aromatized Fortified wine, flavored with various botanicals (roots, barks, flowers, seeds, herbs, and spices). The modern versions of the beverage were first produced in the mid to late 18th century in Turin, Italy. While Vermouth was traditionally used for medicinal purposes, it was later served as an apéritif, and in the late 19th century, it became popular with bartenders as a key ingredient for cocktails such as the Martini, Manhattan, Rob Roy, and Negroni.

Historically, there have been two main types of vermouth: sweet and dry.

Vermouth is produced by starting with a base of neutral grape wine or unfermented wine must. Distilled spirits and a proprietary mixture of dry ingredients, consisting of aromatic herbs, roots, and barks, are added to the base wine. After the wine is aromatized and fortified, the Vermouth is sweetened with either cane sugar or caramelized sugar, depending on the style.

The name "vermouth" is the French pronunciation of the German word Wermut, for wormwood, that has been used as an ingredient in the drink over its history. Fortified wines containing wormwood as a principal ingredient existed in Germany around the 16th century. At about this time, an Italian merchant named D'Alessio began producing a similar product in Piedmont as a "wormwood wine".

D'Alessio's version of the libation contained other botanical ingredients in addition to wormwood. Competing brands developed shortly thereafter in eastern and southeastern France, containing their own proprietary mix of ingredients. The use of vermouth as a medicinal liquor waned by the end of the 18th century, but its use as an apéritif increased in Italy and France. By the late 19th century, Vermouth was being used in cocktails.

Lower Quality Fortified Wines: A note on low-cost Fortified wine. While any wine that has distilled spirits added to it is technically a Fortified wine, low-cost mass-produced Fortified wines such as Mad Dog 20/20 and Wild Irish Rose do not employ the intensive production techniques noted above and are not included in the same high-quality category as those listed above.

There are many other excellent Fortified wines made throughout the world, but those listed above are the most popular. Next, we will tell you about one of the newest Fortified wines that was created by the writers of this E-book: Valkyrie Geistwein.

CHAPTER 5 – VALKYRIE GEISTWEIN: THE NEXT GENERATION OF FORTIFIED WINE



Photo Courtesy Valkyrie Crafted Libations

THE VALKYRIE CRAFTED LIBATIONS STORY

As stated previously, Steve Jeremias and Rob Lane grew up together in Central Pennsylvania. In high school, they formed a successful Rock band called Crimson, with Steve on keyboards and Rob on guitar and vocals. After high school Steve went to college as a Political Science major and Rob continued to perform music for a while and then went to college for Business Management. Steve ended up in Investment Banking for the next 30 years, living in Philadelphia, San Diego, Nashville, and NYC. Rob landed in Banking, but continued to perform music on the side, as well as write about and review Finger Lakes wine, tasting over 800 wines per year in the Finger Lakes on his Finger Lakes Weekend Wino website and in a monthly wine column in Mountain Home magazine.

After many years making home wine and after winning an award in a wine competition, Rob decided to get into the operational side of the wine business and became a partner in a winery in Central Pennsylvania in 2009. In 2014, Rob called upon his old friend Steve and Steve's wife Brenda, who is an Accountant, to come up with strategies to help the winery expand. Steve and Brenda came up with several strategies, including the development of a new Fortified wine product.

HOW TO UNDERSTAND & ENJOY FORTIFIED WINE

Steve initially came up with the idea for the new Fortified wine product at the Metropolitan Opera House in NYC while watching the well-known opera Die Walkure, which features the famous orchestral piece called Ride of the Valkyrie. The story of the Valkyrie spoke of a strong beverage that was drunk by fallen warriors in the afterlife. In his ever-curious mind, Steve wondered what this mythical beverage would be like and he called his friend and winemaker Rob Lane after leaving the opera and they immediately started development of Valkyrie fortified wine products. The first production of Valkyrie Goldbaender sold out within months at Rob's Pennsylvania winery and they knew that they were on to something. Rob's Pennsylvania winery continued for a few more years until the winery property was sold in 2016.

However, Steve and Brenda obtained the rights to the trademarks and recipes of the Valkyrie products and they decided to open a winery in the Finger Lakes, with Rob hopping on board as the winemaker. After evaluating over 50 properties in the Finger Lakes, Steve and Brenda decided on and purchased the current location in Burdett NY in August of 2016. The location had been used as a wood products retail shop and took many months to clean out. Steve and Rob continued to work on recipes and creating new processes and techniques that continued to improve the products. Steve, an experienced carpenter, along with his wife Brenda, took on the role of designing and remodeling the building to house a tasting room. Many obstacles delayed the construction, including two sudden passings of legal advisors, record flooding in the area while remodeling, and then a little thing called a pandemic that crippled supply chains and slowed getting construction supplies to a crawl and made finding local construction help extremely difficult. But Steve and Brenda, with the help of friend and consultant Michael Gaughler soldiered on and persevered through all of the obstacles and delays.

WHY NAME IT VALKYRIE?

In Norse mythology, The Valkyrie were fearless warrior goddesses, immortal soul-shepherds who traveled the heavens at the speed of thought, mounted atop glorious winged steeds. A majestic cavalcade of celestial music, lightning and thunder often heralded their descent into battle. The Valkyrie's quest: Retrieve

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the souls of the bravest of the battlefield fallen warriors. Then back across the heavens they raced, taking the fallen soldiers home to a fate and honor so magnificent, which awaited in the triumphant Halls of Valhalla in the kingdom of Odin, where they regaled with strong drink and stories of the battle. The Valkyrie are one of numerous stories and poems handed down through Norse history, possibly dating back to the 1st century AD and first catalogued in a book called the Codex Regius, written in the 13th century.

From that night at the New York Metropolitan Opera House listening to The Ride of the Valkyrie and thinking about the “strong drink” referred to in the story, Steve knew the name would be Valkyrie, in honor of the Valkyrie warrior goddesses.

WHAT IS GEISTWEIN?

Geistwein is a trademarked Fortified wine developed at Valkyrie Crafted Libations (VCL) over 10 years of research and development, where every step in the Fortified wine process was researched and challenged to produce a more flavorful, more balanced, multi-layered and smoother Fortified wine product, that pays tribute to traditional techniques, but reimagines them for the modern palate. They named it Geistwein to honor the Nordic lineage of The Valkyrie warrior goddesses, with Geistwein meaning “Spirit Wine” in the ancient Germanic language. VCL based the recipe for Geistwein, in part, on an ancient Roman wine called Mulsum, a strong wine with honey added, and they use locally-sourced honey as a component of Valkyrie Geistwein. Mulsum appeared to be the most similar drink to the strong beverage referred to in the Valkyrie mythology.

Many people that VCL surveyed during their research stated that traditional fortified wines can be a bit heavy-handed, with boozy aromatics, an alcohol-forward taste profile, and often too cloyingly sweet. VCL endeavored to make a new style of Fortified wine with a smoother alcohol profile, while maintaining the complex flavors of traditional Fortified wine, creating a Fortified wine that can sit at the table as a premium standalone wine, and not just relegated to the after-dinner Dessert menu. Our reinvented processes do add additional cost to our production methods, but we feel that the result is well worth it.

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VCL experimented with multiple grape types before deciding on Riesling as the base wine for our Goldbaender and Hasselnuss white Geistweins, and choosing a Cabernet Sauvignon/Saperavi blend for our Dragonsblut red Geistwein. With the help of our Craft Brandy partner, VCL searched for the perfect grape type for distillation and implemented strict temperature controls and alcohol levels for the Brandies used in Geistwein. This created a much smoother Brandy that imparted delicate aromatics and a silky alcohol profile to the Geistweins. VCL also experimented with multiple yeast types before finding the exact ones to help impart maximum aromatic and flavor components in the base wines, and used intense quality control parameters in all aspects of the production processes. Many other innovations were also implemented in the production processes.

As described below, VCL produces 6 Geistwein products: Goldbaender Unoaked, Goldbaender Oaked, Hasselnuss Unoaked, Hasselnuss Oaked, Dragonsblut Unoaked, and Dragonsblut Oaked.

VALKYRIE GOLDBAENDER: Goldbaender roughly translates to “Ribbons of Gold” in the Germanic languages and refers to the Gold color of the wine, and also refers to the flakes of Gold that are found in the Goldbaender Reserve product, pending TTB approval. Goldbaender Geistwein is available in Oaked and Unoaked styles.

Valkyrie Goldbaender Edeleiche (Oaked): French Oak and Premium Brandy-Infused, Valkyrie Goldbaender Edeleiche produces zesty citrus and noble spice aromatics, enhancing the impressive soft floral and citrus flavor components, all leading to a stunningly elegant finish.

Valkyrie Goldbaender Reinlicht (Unoaked): Subtle hints of majestic vanilla, spice and smooth brandy aromatics all lead into multi-layered tones of apricot, tangerine and spiced citrus, resulting in a majestic flavor combination, which then flows into a silky heat finish.

VALKYRIE HASSELNUSS: Hasselnuss translates to “Hazelnut” in the Germanic languages and refers to the natural Hazelnut flavors that are infused into the Hasselnuss products. Hasselnuss Geistwein is available in Oaked and Unoaked styles.

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Valkyrie Hasselnuss Edeleiche (Oaked): French Oak and Premium Brandy infused, Valkyrie Hasselnuss Edeleiche renders sublime notes of cognac aromatics that precede an impressive multi-toned palate of flavors, including juicy nectarine, subtle vanilla and fresh fleshy key lime, leading into an immense ambrosial hazelnut finish.

Valkyrie Hasselnuss Reinlicht (Unoaked): Premium Brandy infused, Valkyrie Hasselnuss Reinlicht offers fresh hazelnut aromatics which give way to bold and gallant hints of apricot and citrus, with sub-tones of deep cocoa and caramel, heading into a finish of fresh tea leaf, Hazelnut and subtle yet ethereal heat.

VALKYRIE DRAGONSBLUT: Dragonsblut roughly translates to “Dragons Blood” in the Germanic languages and refers to the deep Ruby color of the Dragonsblut wine. Dragonsblut Geistwein is available in Oaked and Unoaked styles.

Valkyrie Dragonsblut Edeleiche (Oaked): Valkyrie Dragonsblut Edeleiche is French Oak and Premium Brandy Infused. Note the robust character traits of wonderful dark fruit aromatics, leading into a bountiful collage of mixed berries, with black raspberry taking a subtle yet balanced lead, ultimately cascading into an exquisite French oak finish of silky heat.

Valkyrie Dragonsblut Reinlicht (Unoaked): Valkyrie Dragonsblut Reinlicht offers delightful scents of dark cherry, anise and plum leading into full-bodied exploration of savory fruit flavors including cherry, raspberry, blueberry and elderberry, all carefully balancing into a silky finish of subtle yet silky heat.

We invite you to visit www.geistwein.com for more information on these wines. Next we explore how to enjoy the wonderful world of Fortified wine.

CHAPTER 6 – ENJOYING FORTIFIED WINE (Serving tips, Cocktails, Food Recipes)



Although it has been traditionally served as an after-dinner drink, Fortified wine has become accepted as a wine to be served for just about any occasion. Fortified wines are usually served in small cordial glasses, brandy glasses, or small tapered wine glasses and sipped to enjoy the multi-layered aromatics and flavors. Because of their higher alcohol content, these wines are meant to be served and drunk in small serving sizes. The key is to choose glassware that accents the bouquet of the aromatics that are the hallmark of Fortified wine. These wines are at their best served at room temperature whereby the complex aromatics and flavors are not inhibited by chilling, however some do enjoy them slightly chilled.

Since Fortified has a higher alcohol content, it is important to give the wine time to allow the alcohol aromatics to diffuse and allow the complex flavors to ‘open up’ in the glass. For some Fortified wine, imparting oxygen into the wine by using an aerating pourer or by decanting Fortified wine into a glass decanter for 15 to 30 minutes allows the maximum aromatics and flavors to develop. Because of the addition of distilled spirits, Fortified wine will normally last longer after being opened than standard wine. It is not uncommon for Fortified wine to remain full-flavored for many months after opening. Unopened bottles should be stored in a cool dark location on their sides and, depending on the type, can be cellar aged for many years.

Not many other wines beat Fortified wines in being used for cooking because of the concentrated flavors they can impart to foods. Traditionally, Fortified wine has been served with appetizers, such as fruit, cheeses, nuts, and cheese or nut based appetizers, and also with desserts that feature fruity or chocolate and caramel flavors or creamy textures, but some experts now recommend Fortified

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wines with spicy entrée dishes as an additional kick of flavor. You are encouraged to experiment on your own and find your own favorite pairings.

The classic use of Fortified wine for food is to make a wonderfully flavorful wine reduction sauce to accompany a variety of poultry and red meat dishes.

Super Simple Wine Reduction:

2 cups Fortified wine

2 tablespoons butter

Combine ingredients in a medium saucepan over medium heat, uncovered, and bring to a slow boil. Continue to boil uncovered until thickened and reduced in half to about 1 cup, about 20-30 minutes. If you want a sweeter reduction for a dessert dish, stir in one to two Tablespoons of brown sugar on low heat after the liquid has reduced by half.

Here's an easy way to know when your liquid has reduced by half. Before you apply heat to your liquid, dip the end of a clean wooden spoon or wooden ruler into the pot and let it sit there for a few seconds, so that it soaks into the wood a little bit. Then, using your fingernail or a table knife, make a mark where the liquid level was on the wooden spoon. Then make another mark halfway between your nail mark and the end of the spoon. Now you have a gauge that will tell you when you're done. When the liquid in the pot is the same height as your halfway mark, you've reduced that liquid by half.

You could include many optional ingredients such as finely chopped sauteed onions, various spices, etc., depending on the foods being prepared.

Though Fortified wine is best enjoyed straight up, they can also be used in a variety of cocktails.

For a lower alcohol drink, mix Fortified wine and a splash of tonic or soda or dark fruit juices like pomegranate.

Some refreshing Fortified-wine cocktails to try are:

Martini: Stir 1 oz. Dry Vermouth or Valkyrie Goldbaender and 3 ounces Gin with ice, strain, and garnish with lemon peel.

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Jerez Cocktail: Stir 2 oz Sherry or Valkyrie Hasselnuss, 1 oz peach brandy, and 1 oz triple sec and serve.

Adonis: Stir 2 oz. Sherry or Valkyrie Hasselnuss, 2 oz. Vermouth and 2 dashes of orange bitters with ice and serve.

The Cousin Eddie: 1 1/2 oz. Tequila, 1 oz. Red Port or Valkyrie Dragonsblut, 1 oz. Coffee Liqueur, Orange twist for garnish.

CODA

Thank You for reading about the amazing world of Fortified wine. We hope that you have enjoyed it and have learned more about Fortified wine. Steve and Rob look forward to seeing you at the Valkyrie Crafted Libations tasting room in Burdett NY if you are in the area, and please visit the Valkyrie website at www.geistwein.com for more information on Valkyrie Geistwein – The Next Generation of Fortified Wine.

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Valkyrie Crafted Libations reminds consumers to Drink Responsibly.