2000 YEARS OF WINE CULTURE 2000 YEARS OF STEEP SLOPE VITICULTURE

The vineyards along the Mosel and its tributaries shape a unique landscape. They represent the largest continuous steep slope wine-growing area in the world. The foundations for viticulture along these steep slopes reach far back into the history of the Earth: soils have developed on the dark mineral-rich slate which was formed 400 million years ago in the Devonian era, creating an ideal growing medium for the exceptional white grape variety Riesling.

2,000 years ago inhabitants of this region recognised the potential of the unique geology, topography and microclimate; they started utilising the south facing steep slopes of the river valley for viticulture. This marked the start of an unparalleled landscape of wine culture that has further developed over the centuries and still characterises these river valleys to the present day.

Since the late 19th century, Riesling has been the predominant grape variety grown in this region, and for good reason: the steep slope Riesling wines from Mosel, Saar and Ruwer reflect its terroir - the interplay between soil, climate, vine and vintner skill - magnificently. Mineralic, fruity and palatable white wines are the hallmark of the Mosel wine region; wines that perfectly complement a modern lifestyle and international cuisine.

This brochure endeavours to provide an insight into the major features of the Mosel wine region, its history, geology, grape varieties and wine styles. Exciting discoveries are awaiting wine lovers beyond this booklet. 'The proof of the pudding is in the eating' and we believe that this information will animate and enhance the conscious enjoyment of Mosel wines which are available from merchants and gastronomists the world over.

We invite you to journey to our region and experience its rich cultural heritage. In the DVD entitled 'Mosel. Saar. Ruwer – Discover and Enjoy', we have the pleasure of sharing with you insights into the art of winemaking and the exceptional beauty of the landscape. Our wine guide contains a wealth of information on local wine estates, cosy wine bars and a selection of B&Bs. Recommendations of wines from the current vintage and further information can be found at www.weinland-mosel.de



THE MOSEL WINE GROWING AREA GEOGRAPHY AND HISTORY

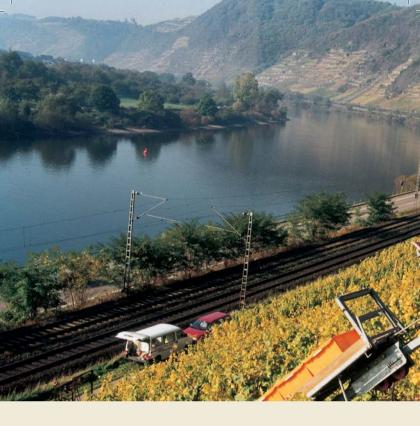
The wine growing area of the Mosel is regarded as the oldest German wine region and counts amongst the traditional European wine growing regions. The cultivation area is situated in western Germany, between the Franco-German national border and the Rhine. Vines are found along the 250 kilometre long Mosel river course on German territory as well as along the lower reaches of its tributaries, the Saar and Ruwer, which also constitute wine cultivation areas in their own right.

The rivers have carved their way deeply into the Rhenish Slate Mountains, creating the geological and climatic prerequisites



for viticulture. As a result of its sheltered geographical situation, the Mosel valley area is one of the warmest climatic zones within Germany. Frost is prevented by the storage of heat in the river. Temperature fluctuations are moderate: mildly cold winters and enjoyable warm summers with sufficient precipitation are the norm. The average annual temperature is about 10°C and this moderate climate, despite being at 50 degrees latitude, results in a tremendously long growing period from April to October. In some years grapes ripen even into November.

Numerous archaeological finds and historical documents confirm that already in the first Century AD, Romans cultivated vines on the steep slopes of the river valleys. Previously, around 500 BC, the Celtic inhabitants of the region appreciated wine as a luxury



drink. There is no record that they cultivated wine grapes, but it is conjectured. In 50 BC, Roman legions conquered the Mosel valley and in the year 17 BC the city of Trier (Augusta Treverorum) was founded. It is assumed that the increasing demand of both a growing military and civil population in Roman times lead to cultivation of vines on a large scale. In the Late Antiquity period the city of Trier counted around 60,000 inhabitants and, as an imperial residence, was one of the capital cities in the Roman Empire. Along the entire Mosel archaeologists have found remains of Roman estates, temples, mausolea and forts as well as various wine presses at the foot of several steep vineyard slopes.

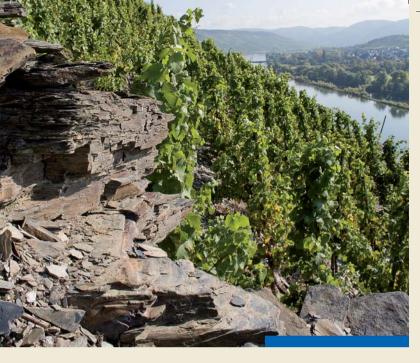
After the decline of the Roman Empire, monasteries played a major role in the development of viticulture. During the High Middle Ages the Order of Cistercians brought knowledge of wine from Burgundy to the Mosel. In the 18th century, the last Prince Elector of the city of Trier, Bishop Clemens Wenzeslaus of Saxony, issued radical measures to improve the quality of viticulture, proving particularly beneficial for the Riesling grape; the effects of these innovations persist to the present day. Viticulture by monks ended after the French Revolution with the secularisation by Napoleon Bonaparte at the beginning of the 19th century. Estates owned by abbeys went over to noble and civil proprietors. Karl Marx was born in Trier in 1818: the first half of the nineteenth century witnessed a difficult phase and the great suffering of



the vintners influenced the development of his theses. Fortunes changed and Mosel viticulture in the late 19th century experienced a period of prosperity. The steep slope Riesling wines became the most demanded and most expensive wines worldwide. They were savoured at court by monarchs from London to St. Petersburg and in world class gastronomy from Berlin to Paris at prices that exceeded the most famous Châteaux wines from Bordeaux or Burgundy.

Huge demand for fruity white wines earned the area another boom after the end of World War II. The area under vines increased from 7,500 hectares at the end of the 1950s to 12,300 hectares at the end of the 1990s. Besides Riesling, other grape varieties were encouraged. Today about 5,000 vintners cultivate roughly 9,000 hectares of vines, making the Mosel the fifth largest of Germany's thirteen wine growing areas.

In recent years, steep slope Riesling has experienced a renaissance. Riesling vines are planted on around 5,300 hectares (60% of the cultivation area). Derelict vineyards on steep slopes have been reinstated and planted with vines again. The unique combination of climate, grape variety and 2000 year old vintner tradition culminate in much sought after, contemporary, elegant and mineralic wines of distinct character.



DEVONIAN SLATE AND SHELL LIMESTONE VINEYARD SOIL GEOLOGY

Soil and stone impart a distinct and unique character in wines from the Mosel, Saar and Ruwer. 400 million years ago the foundation for Mosel viticulture was created. In the Devonian period today's Mosel valley was covered by an ocean in which enormous quantities of sediments were deposited, forming layers several kilometres thick. When the primary continents Gondwana and Laurussia collided due to tectonic movements, the foundation of today's soils was laid. The ocean was closed between the continental plates and the sea floor was compressed under enormous pressure and high temperatures. The sediments metamorphosed into slate, which was finally folded to a mountain chain. Hence, the Rhenish Slate Mountains came into existence, part of a mountain chain that spanned almost half of the earth's surface, from what is today North America to Czechia.

In the course of millions of years the stone was ever more eroded and folded and the Rhenish Slate Mountains were to some extent levelled and raised. 15 million years ago the primal Mosel started to sculpt the present landscape. The previously wide and straight river bed became ever deeper due to elevation of the Rhenish Slate Mountains over the last 2.6 million years. A strongly meandering river course was created that characterises the landscape up to the present day. Valleys with steep slopes were formed by the carving action of the Mosel and its tributaries. As a result of the numerous meanders, south facing slopes are sometimes found on the right and other times found on the left bank of the river. Thanks to favourable sunlight, they offer ideal growing conditions for the cultivation of vines, as well as habitat for rare fauna and flora.

Half of the vineyard areas are situated on Devonian slate along the Saar, Ruwer and Middle Mosel from Trier to Zell. The lime-free stone imparts a characteristic to the Riesling wine, which is more mineralic than elsewhere. The 400 million year old stone weathers easily and its components disintegrate and enrich the soil; the minerals dissolved in the soil water are taken up by the vines. Depending on the individual situation, pure slate is found in all possible shades from grey, blue to brown and red. This imparts colour to the soil which often has a high proportion of stone mixed with loam. The slate is sometimes so finely structured that it can easily be broken by hand. One major feature of slate is its ability to store heat which is particularly advantageous on cool autumn nights.

The dark Devonian slate is prevalent. Red slate soil can only be found at the beginning of the Middle Mosel near Schweich. A particularity is Red Rhyolite, a stone of volcanic origin which was created in the Wittlich Basin (Wittlicher Senke) from streams of magma around 250 million years ago. This stone is only found in the Mosel viticulture region near the village of Ürzig.

The rocks of today's vineyard terraces between Zell and Koblenz were previously sand beaches and tidelands of the primal ocean. These sandy sediments were pressed into sandstone and the majority of soils along the Lower Mosel are made from quartz-rich sandstone with silt- or clay-slate. The regions which were previously sea, with marine organisms such as coral reefs, developed into lime-rich sandstone which, together with silt- and clay-slate, characterise several sites of the Terraced Mosel.

The situation along the Upper Mosel, where the river forms the border with Luxembourg, is very different. Geologically, this part of the wine cultivating area is closer to the Paris Basin than to the Rhenish Slate Mountains. This region was a flat, shell limestone sea 243 million years ago. Dolomite 'benches' were created from shell-rich sedimentation and lime-rich clay, silt and sand transported by the rivers into the sea. Dolomite outcrops are a frequent occurrence in the landscape of the Upper Mosel. Elbling grapes and varieties of the Pinot family thrive on these lime-rich soils.

In the flood plains, the Mosel and its tributaries deposited an amalgamation of gravel and sand, so-called river terrace sediments. These are the parent materials of vineyard soils in more levelled sites, where Müller-Thurgau and Pinot varieties are commonly cultivated.



MAJOR GRAPE VARIETIES

Riesling (60 % of the cultivated area) Riesling, the queen of white wines, has been cultivated along the Mosel, Saar and Ruwer since the Middle Ages. The grapes mature late and produce elegant, fruity and attractively lively wines which reflect the character of their origin - their terroir - so unmistakable and like no other white wine. Bouquet and taste are often characterised by aromas of fruit: apple, pear and peach together with floral and herbal aromas. More mature wines may reveal aromas of yellow fruit such as apricot, mirabelle, pineapple and lychee, whereas sweeter wines are often reminiscent of exotic fruit, such as mango and passion fruit as well as raisin and honey. The variety is enormous: from off-dry quality wines to mineralic dry First Growth or fruity light Kabinett to noble sweet Auslese, Beerenauslese and Eiswein. The storage potential of premium Riesling wines is phenomenal.

Müller-Thurgau (Rivaner, 14.5% of the cultivated area) The crossing between Riesling and Madeleine Royale is the second most important grape variety of this region. The acidity is less pronounced and its grapes produce mild wines. The bouquet will normally present typical muscat scents. In modern vinification this wine is also called Rivaner and vinified in a dry to off-dry style with fresh, floral and herbal aromas. **Elbling** (6.4% of the cultivated area) This vine variety was popular throughout Germany in the Middle Ages. Today, this variety is only cultivated on a large scale along the Mosel, predominantly on shell limestone soils of the Upper Mosel and in the Cochem area. Elbling wines are lively, crisp and straightforward. They are well suited for the production of Sekt. A mutation is the red Elbling, whose grapes can be used for the making of rosé wine and Sekt.

Pinot Noir (4% of the cultivated area) The German Spätburgunder, internationally known as Pinot Noir, is one of the world's finest red grape varieties. The wines from this variety are fruity, elegant and complex. Since the late 80's many Mosel vintners have revitalised the old red wine tradition. Not only do they succeed on shell limestone soils of the Upper Mosel, but they also produce very interesting wines when grown on soils derived from slate, which are often vinified in barriques (large wooden barrels). Pinot Noir is also vinified as Rosé, for example Weissherbst, or as white wines known as Blanc de Noirs, a term applied to white wines made from red grapes. Pink Sekt from Spätburgunder grapes is also very popular.

Dornfelder (3.8% of the cultivated area) This relatively young crossing between the grape varieties Helfensteiner and Herold has become the Mosel's second most important red wine grape. Its wines are pleasantly aromatic and of intense colour.

Pinot Blanc (2.7% of the cultivated area) This mutation of the Pinot Noir family, known in Germany as Weisser Burgunder or Weissburgunder, produces smooth, elegant and aromatic wines. Pinot Blanc wines are popular and for many vintners a great addition to their portfolio. Together with Weissburgunder, Pinot Gris or Pinot Grigio (Grauburgunder) is cultivated.

Other white grape varieties of minor importance along the Mosel, Saar and Ruwer include Kerner, Chardonnay, Auxerrois, Bacchus, Ortega, Optima, Reichensteiner and Findling.

Other red grape varieties cultivated include Regent, Frühburgunder, Schwarzriesling, Cabernet Sauvignon and Merlot.



THE WINES AND THEIR QUALITIES.

Fruity, mineralic white wines with relatively low alcohol concentrations (7-12%) are the hallmark of the Mosel winegrowing area. They suit modern lifestyles and light, international cuisine. The fruity whites from the steep slopes along the Mosel, Saar and Ruwer are a fantastic match with fish and Asian dishes. The soils in which the vines grow and the long maturation periods both impart a characteristic minerality to the wines. Although the vintners succeed in making light wines with low alcohol contents, they are not lacking in aroma; even full-bodied, dry wines appear light and elegant as a result of the minerality.

The dry, mineralic, steep slope Riesling wines with aromas of pale fruit like apple, pear and peach are an ideal accompaniment to lighter dishes like fish, poultry and salads. Off-dry Mosel Rieslings, with a hint of sweetness, go very well with savoury spicy dishes and rich sauces, whereas noble sweet wines and their exotic aromas go well with mature cheeses and desserts. Noble sweet Mosel Riesling wines that have had several years of bottle-ageing are an ideal match with richer savoury dishes like foie gras or game.

There is more to the Mosel than Riesling: a regional speciality is the ancient grape variety Elbling. The wines are dry, fresh and straightforward and go well with seafood or simple traditional dishes like Winzervesper (a light meal or snack consisting of sliced bread, cold cuts and cheese). Rivaner (Müller-Thurgau) is a dry, fruity wine which goes well with light dishes and is therefore a popular summer wine. The smooth, intense flavoured Pinot Blanc and Pinot Gris are full-flavoured wines that go well with savoury dishes.

Vintners grow Pinot Noir to produce elegant red and fruity rosé wines as well as Blanc de Noirs (literally "white of blacks" meaning a white wine produced entirely from black grapes). New varieties such as Dornfelder and Regent, as well as the French varieties Merlot and Cabernet Sauvignon, yield dark, full-bodied red wines. Mosel wines of specified origin (bestimmter Anbaugebiete, b.A.) are offered in all quality levels from Qualitätswein bestimmter Anbaugebiete, QbA (quality wine from a specific region) to highgrade Prädikatswein (quality wine with Prädikat -designation). The first level of the classification systems is Kabinett, followed by Spätlese and then Auslese. Spätlese wines are made from very ripe grapes and Auslese wines are made from selected very ripe bunches of grapes. Rarities are Beerenauslese and Trockenbeerenauslese, which are made from individual, overripe, shriveled grapes. The noble rot, Botrytis, plays a major role as this fungus affects the grapes in autumn and withdraws water, with the effect of concentrating fruit sugars and other components. Eiswein is made from grapes that have been naturally frozen on the vine, similarly reducing the water content of the grapes and resulting in a very concentrated wine.

Vintners offer an extensive array of styles: the range of dry to off-dry wines is augmented by noble, sweet rarities. Elegant, mineralic, steep slope Riesling wines with a hint of natural sweet fruit, predominantly light Kabinett and fruity Spätlese, are of international renown.

Noble, sweet Auslese, Beerenauslese and Trockenbeerenauslese wines have a great tradition and can fetch several thousands of Euros at auctions. These wines benefit from a terrific ageing potential and offer great enjoyment, even after decades.

Most vintners also produce sparkling wine. Above all, Riesling, Elbling and Pinot can produce premium Winzersekt (vintner Sekt, with a minimum of 9 months on the lees) and Crémant, made according to the méthode traditionnelle (traditional method). Winzersekt can be enjoyed on its own as a first-class apéritif or as accompaniment to many dishes.

Fine Riesling wines from Mosel, Saar and Ruwer are found on wine lists of the best restaurants around the world from Berlin, London, Amsterdam, New York, Las Vegas to Italy, Spain and France, where they are increasingly appreciated as a fantastic complement to food.



THE SAAR

Viticulture is exclusively carried out on Rhineland Palatinate territory between Serrig and Konz, where the Saar flows into the Mosel. The vineyards of the Saar are frequently located on south facing slopes of valleys. The soils were mainly formed on Devonian slate, although in some areas Diabase is found, a stone of volcanic origin.

In recent years, the Saar cultivation area has grown through the reclamation of old steep slopes. New and well established estates pin their hopes on achieving the characteristic steep slope Riesling from Devonian slate soils. Nearly 750 hectares are covered with vines, around 80% with Riesling.

Due to the Saar valley's higher altitude and the slightly lower average temperatures, the maturing period for Riesling is even longer than along the Mosel, hallmarking its wines by a strikingly unique character. Saar Riesling wines impress with their clean, crisp taste profile complemented by an attractive minerality. They are considered to have a long storing potential and regularly surprise the wine lover, even after decades of storing, with their freshness. The wines usually demonstrate aromas of citrus fruit.

Although this area is relatively small, the region possesses a variety of exceptional steep slope vineyards with the Scharzhofberg being one of the most famous Riesling vineyards in the world. Hugh Johnson, the internationally recognised British author and wine expert declares the region produces "one of the world's most outstanding white wines, beguiling sip by sip."

Although the grape variety Müller-Thurgau (5%) is the second most frequent variety on the Saar, it only plays a minor role. It is worth noting that the proportion of Pinot Blanc (4.3%) is above the regional average. Pinot Noir is cultivated to the same extent, whereas Dornfelder is hardly cultivated here (only 1.4%).



THE RUWER

The Ruwer valley east of Trier is, with only 190 hectares of vines, the smallest section of the Mosel cultivation area. The tiny stream winds its way from the Hunsrück uplands, lined by fields, vines and forest through a narrow valley and flows into the Mosel south of Trier.

The vineyards are situated on south facing slopes between the villages of Sommerau and the Trier suburb Ruwer. All Ruwer valley soils are exclusively formed from Devonian slate. Like the Saar, the vineyards along the Ruwer are at a higher altitude than the Mosel, resulting in a prolonged ripening period.

The fruit aromas in the wines are often reminiscent of blackcurrant, raspberry and blackberry and sometimes accompanied by aromas of herbs. The steep slope Ruwer Riesling wines benefit from high minerality. The Ruwer valley grows the largest amount of Riesling in the entire cultivation area, nearly exclusively on steep slopes (90%).

The second most important wine grape is Pinot Noir, cultivated on 2.6% of the area and Pinot Blanc with 2.1%. Müller-Thurgau and Kerner, both with 1%, play a minor role here. A mutation of Pinot Noir, Frühburgunder, an early ripening variety which is rather rare in the entire region is represented with 1% coverage.

In this area viticulture has been flourishing since at least Roman times. Important monasteries, partially built on Roman foundations, cultivated vineyards here. To this very day, the Ruwer stands out with several of the most renowned estates of the region. The results of a 2000 year old viticultural tradition are sublime Riesling wines which are fine, delicate and display subtle fruit aromas.



THE UPPER MOSEL

Geographically, scenically and viticulturally, the Mosel shows a different side to its character in the southwest of this region. The valley is wider and the slopes less steep than along the downstream course. In the border triangle with France and Luxembourg the vines grow on soil derived from Dolomite stone. The soils are characterised by shell limestone, marl and sediments of the Triassic Period, deposited more than 200 million years ago. Dolomite rocks often protrude into the valley. The ecological region of the Upper Mosel, sometimes referred to as the Southern Wine Mosel, divides into two viticultural regions. The Upper Mosel region comprises roughly 680 hectares of vines and is situated on Rhineland-Palatinate territory between the mouth of the Saar near Konz and Palzem, close to the Saarland border. The second region is Moseltor with 112 hectares of vines situated on Saarland territory near the French border.

The grape variety Riesling dominates the entire cultivation area, but is hardly found in the region southwest of the city of Trier; Elbling, the ancient grape variety, is the number one grown here. It was spread throughout the whole of Germany until the High Middle Ages. Today, this variety is generally only found on the Upper Mosel where more than 400 hectares of Elbling (more than 60% of the cultivated area) are grown. In recent years wine lovers have rediscovered this straightforward dry Elbling wine as a refreshing everyday drink which superbly lends itself to the production of premium sparkling Sekt.

The Pinot varieties, which thrive on shell limestone soils, have gained great importance on the Upper Mosel. Pinot Blanc, Pinot Gris, Auxerrois, Chardonnay and Pinot Noir together account for a total of 10% here. Even Müller-Thurgau (5%) and Kerner (2%) have a greater coverage than Riesling, which only accounts for 2% in this region.



THE MIDDLE MOSEL

The Middle Mosel is the heart of the cultivation zone; between Trier and the village of Briedel there are 5,850 hectares of vines. The soils of the steep slopes consist mostly of weathered slate, dominated by the dark Devonian slate in all its possible hues. A geological particularity is the Red Rhyolite found near Ürzig which is, unlike slate, of volcanic origin. It was created from magma streams 272 million years ago. Near the town of Schweich one can find red clay-slate which was created through modification of Devonian slate by chemical weathering processes. Near Trier, vines are also found on the left Mosel bank on variegated sandstone. The cultivation of vines is favoured by a positive climate arising from the sheltered valley and the storage of heat by the Mosel. The average annual sunshine is nearly 1,400 hours. Sufficient precipitation and woodlands on the heights ensure a good water supply in the vineyards.

Riesling is grown on more than 62% and Müller-Thurgau on around 17% of the cultivated area. Red grapes are grown on nearly 10%, primarily Pinot Noir and Dornfelder varieties. The white variety Kerner is represented with more than 5% and Pinot Blanc with 2% coverage. The steep slope Riesling wines of the Middle Mosel frequently demonstrate aromas of yellow and white fruit as well as floral notes. The wines are fruitier and more voluptuous than those from Saar and Ruwer.

Along the 100 kilometres of the Middle Mosel River there is a string of famous wine villages and steep slope wine estates. Here, historical vintners pressed their grapes - archaeologists have discovered remains of Roman wine presses at the bottom of many of the steep slopes. In the town of Neumagen a stone crypt in the form of a Roman wine ship was discovered.



THE TERRACED MOSEL

The Mosel valley becomes increasingly narrow from the village of Zell onwards. The vineyards appear to grow straight out of the river. In many cases the slopes are so steep that the vines only find space in narrow terraces supported by retaining walls. This is why the Lower Mosel is often referred to as the Terraced Mosel. The manmade terraces, created many centuries ago, are impressive cultural monuments.

The stretch of the Mosel between Zell and the city of Koblenz comprises roughly 1,450 hectares of vines. Here, Europe's steepest vineyard, the Calmont, is found between the wine villages Bremm and Ediger-Eller. Soils are formed over harder stone than in the Middle Mosel and are predominantly developed from quartzite sandstone with silt- and clay-slate and to a lesser extent from limerich sandstone with silt- and clay- slate.

Due to the narrower valley and lower altitude the average annual temperature is the highest in the region. The terraces, with their warm micro-climate, are not only favourable for Riesling vines (which comprise over 60%), but also provide a habitat for rare plants and animals including the Mountain Apollo butterfly (Parnassius apollo) and the Western Green lizard (Lacerta bilineata). The Riesling wines are frequently more opulent in fruit and aroma. The most important white grapes after Riesling are Müller-Thurgau (14%), Pinot Blanc (3%) and Elbling (2%). Red grapes have a share of 14% in the region of Cochem Castle, which is higher than the regional average. Here, the Pinot Noir and Dornfelder varieties dominate (6% each).

The reclamation of steep slope vineyards and a focus on characteristics reflecting the individual terroir has reinvigorated the Terraced Mosel region in recent years. In a spectacular environment, surmounted by ancient castles, vintners commit themselves to the making of outstanding Riesling wines.