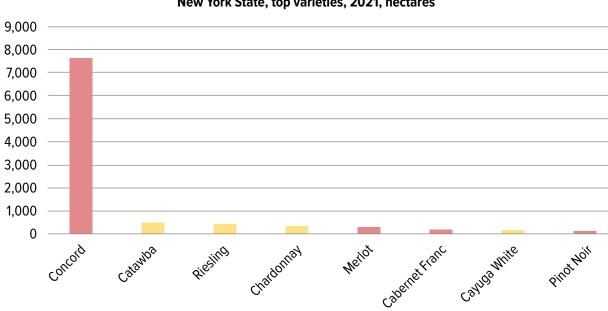
26. New York State

New York State is situated in the north-eastern corner of the USA, bordering the Great Lakes and the St Lawrence river to the north and west and down to a small Atlantic coastline around Long Island in the south-east. Although annual temperatures are generally cool, different parts of the state experience very different climatic influences. Although hybrid and native varieties dominate in terms of hectares planted, New York is the third largest producer of *V. vinifera* wines by volume in the USA, and by some way the largest producing state on the east coast.

Early settlers near to the coast experimented unsuccessfully with vines brought over from Europe and viticulture only restarted in the state in the mid-1800s, using native American vines. Due to the severe continental climate upstate, plantings were made where large bodies of water would have a moderating effect, namely along the Hudson river, on the lands bordering the Finger Lakes and along the southern shoreline of Lake Erie.

Following the repeal of Prohibition, winemaking in the state was dominated by a few large wineries operating in the Finger Lakes with locally grown native vines and made wines brought in from California. Years of failure had led to the general belief that *V. vinifera* vines could not withstand the area's long and tough winter conditions, but in 1957 Dr Konstantin Frank, after years spent experimenting with Riesling and Chardonnay scions grafted onto the hardiest of rootstocks, succeeded in over-wintering his own vines while native and hybrid vines succumbed to the cold. To emphasise the point, he bought land, planted vineyards and opened his own winery, Vinifera Wine Cellars.

The state's Farm Winery Act of 1976 allowed grape growers to open wineries and sell directly to the public, after which many new, small wineries were established, growing a mixture of native, hybrid and vinifera vines. Vineyards sprang up in previously unplanted



New York State, top varieties, 2021, hectares

Source: New York Wines¹

Note: Catawba is an American variety which has the strong influence of V. lambrusca in its genetic makeup.

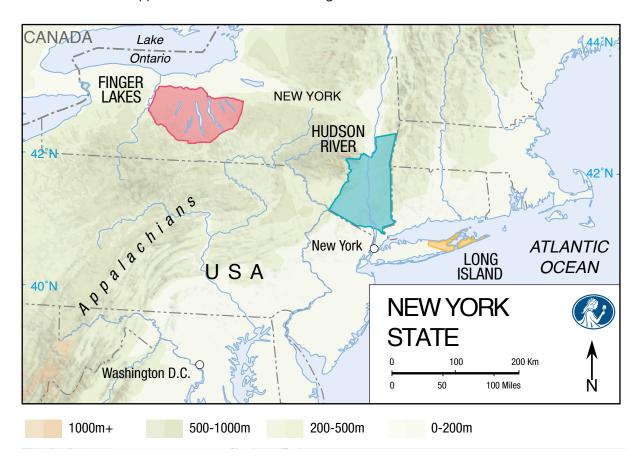
regions of the state, such as the eastern forks of Long Island, now a significant AVA. There are 11 AVAs in the state, of which the most important producing areas are the Finger Lakes AVA and the Hudson River Region AVA as well as Long Island. Currently, New York State has just over 470 wineries, of which two-thirds have been established since the Farm Winery Act, producing between 1.1–1.4 million hL of wine a year.²

26.1. Wine Regions FINGER LAKES AVA

The Finger Lakes AVA is located in western upstate New York, sitting below Lake Ontario and the Canadian border. It is the largest wine-producing region in New York State with 3,800 ha under vine.³ It is one of the coldest AVAs in the USA.

Growing environment and grape growing

The region has a continental climate with warm summers and cold winters. The AVA covers 11 finger-shaped lakes, without which winters would be too cold for *V. vinifera* grapes. Although these lakes are not particularly large, they are extremely deep (the deepest, Seneca Lake, is almost 200 m deep) and can fail to freeze during the winter. The lakes have several effects:



- The topography of the region, with slopes around the lakes, enables cold air to drain towards the water. As it reaches the lake, the air warms and rises creating a vacuum that draws more cold air off the land.
- The lakes can generate their own lake-effect snow, which can also help to insulate vines during the winter.

- The lakes provide a warming influence in the autumn, enabling the grapes to ripen over a longer period and reducing the risk of autumn frosts.
- In the spring, cool air from the lake delays budburst, reducing the chance of damage in spring frosts.

Most of the vineyards are located around Canandaigua, Keuka, Seneca and Cayuga lakes (the latter two are independent sub-AVAs).

Most vineyards are sited on the steeper areas, where cold air flows down towards the lake, rather than in the cold air pockets in the flat bench areas. Fertile soils and sufficient rainfall throughout the year means that many vineyards are planted with low densities of large vines. Training and trellising systems such as Scott Henry are common, in which grape growers split the canopy either vertically or horizontally to allow greater air circulation (reducing fungal disease) and light penetration. Although snow can help to insulate the vines during the winter, many growers further protect the vines from winter freeze by hilling up the soil to cover the graft union.

The Finger Lakes area only supported cold-hardy hybrids, such as Concord, Niagara, Cayuga and Vidal, until Dr Konstantin Frank came to the Cornell University Geneva Experiment station in 1951, where he introduced grafted cool-climate *V. vinifera*. A key consideration when selecting grape varieties is the ability to withstand cold winter temperatures, and this property has led to Riesling and Cabernet Franc being the most planted white and black grape V. vinifera varieties respectively. Ability to ripen sufficiently in the growing season is also important, particularly for black grape varieties.



Snow providing insulation for vines in the Finger Lakes

Grape varieties, winemaking and wine styles

Riesling is the most reputed *V. vinifera* grape variety from the Finger Lakes. A number of producers make multiple Riesling wines, often at different levels of sweetness from dry to sweet, although the majority are dry to medium-dry. The wines have high acidity, medium (–) to medium body and fresh flavours of apple, lemon and peach. Alcohol levels range from low to medium depending on style made (sweeter wines often have lower alcohols). The wines are made using protective techniques and fermented at cool temperatures in stainless steel. Some producers choose to use a few hours of skin contact before pressing, to enhance flavour and texture, or keep the wines on the lees after fermentation, also to enhance texture. Wines with residual sugar may be achieved by late- harvesting, botrytis and/or stopping fermentation early. Finger Lakes Rieslings tend to be good to very good in quality, with some outstanding examples, and mid- to premium-priced.

Chardonnay is also widely planted and used in still and sparkling wines. The still wines are usually medium bodied, with medium (+) to high acidity and citrus flavours. They are often fermented and matured in oak to add texture and toasty flavours.

Cabernet Franc is the most planted *V. vinifera* black grape. Mid-ripening and winter hardy, it is able to produce adequate yields of ripe grapes in most years. Producers are using less new oak than in the past, and a number of producers make at least one Cabernet Franc without any oak maturation. Oak tends to be French or Hungarian, both of which tend to give subtler flavours than American oak, which could overwhelm the wines. The wines tend to have medium (–) to medium body and tannins with flavours of red cherry, cranberry and black plum, sometimes with a herbaceous note. They are often good to very good and mid-priced.

Other popular varieties include Pinot Noir, Gewurztraminer, Cabernet Sauvignon, Merlot and Pinot Gris. Significant producers include Hermann J. Wiemer and Forge Cellars.

A significant proportion of hybrids and American vine species are also grown. The production of many of them is used in grape juice and jellies/jams, but some are also used for wines. These varieties are generally used to produce inexpensive wines, partially because they are easier to grow than *V. vinifera* varieties and also because the quality of the wines that they produce does not match that of the *V. vinifera* varieties grown in the region. However, some hybrids, such as Traminette (Gerwurztraminer-like aromas, with higher acidity and lower alcohol) and Vignoles (susceptible to noble rot, high acid, used for non-dry styles), have the potential to make good quality wines. As found in Ontario across the Canadian border, Vidal is used in ice wine production.

LONG ISLAND AVA

Long Island extends from Manhattan eastward into the Atlantic Ocean. The Long Island AVA covers a large area at the easternmost end of the island, where it splits into two peninsulas – the North Fork and the Hamptons sub-AVAs. 1,200 ha are planted with vines.⁴ Although these sub-AVAs contain the most vineyards and wineries, the larger Long Island AVA captures the wineries located outside of the sub-AVAs.

Growing environment and grape growing

The Long Island AVA is surrounded by water – the Atlantic Ocean, Peconic Bay and Long Island Sound. This feature creates a maritime climate and long growing season because the water bodies slowly release the accumulated summer heat into the autumn and harvest period. As a result, this area is able to ripen black Bordeaux varieties, with Merlot in particular

as the signature variety of the region, but also a range of other grape varieties including Chardonnay and Sauvignon Blanc.

High humidity means that fungal diseases are problematic, although windy weather in coastal sites can alleviate this. Management options include spraying, leaf removal to improve air circulation around the grapes and sorting grapes in the vineyard or winery. Organic grape growing is difficult in such a climate, but there are a number of local sustainable certification bodies.

The North Fork is slightly warmer and more protected from the Atlantic Ocean's weather events, and contains the large majority of the vineyards in comparison with the Hamptons.⁴ The North Fork has sandy soils, whereas



Coastal vineyard locations on Long Island

the Hamptons' vineyards are on silt loam soils. Both soil types are free-draining and low in fertility, which limits vine vigour. Vines are generally trained and trellised to VSP (vigour is not as high here as in the Finger Lakes).

Grape varieties, winemaking and wine styles

The majority of red wines are matured in oak, mostly French, but some Hungarian and American may also be used. A proportion of new oak is common to add vanilla and clove characters to Bordeaux varieties such as Merlot, Cabernet Sauvignon and Cabernet Franc, either made as single varietal wines or as blends.

Whites, such as Sauvignon Blanc, Riesling and Pinot Gris (made in a dry, light-bodied style), are often fermented at cool temperatures in stainless steel, made in a fruity, unoaked style for early consumption.

Chardonnay may be made in an unoaked style or fermented and matured in oak, often also with malolactic conversion and lees ageing, creating a fuller-bodied, creamy, toasty style; medium (+) acidity balances the best examples.

In general, the wines range from good to very good in quality, and are mid-priced to premium. Significant producers include Wölffer Estate and Channing Daughters.

Many wineries make a large range of wines, including rosés, sparkling wines and sweet wines. As in the Finger Lakes, cellar door is a key route to market, especially given the proximity to Manhattan and the popular holiday destination of the Hamptons.

HUDSON RIVER REGION AVA

Wine has been made continuously in the Hudson River Region for over 300 years, and contains the first commercial winery (est. 1827) and the oldest active winery in the US (est. 1839). Today, there are about 60 wineries in the area.

The Hudson River Region AVA covers a vast area stretching from north of New York City to south of Albany, but vineyard plantings are still small at 100 ha.⁵ The river runs north to south and most vineyards are located within a few kilometres/miles of it on glacial deposits of shale, slate, schist and limestone. The climate is continental with warm summers and cold winters. Spring frosts and winter freeze are problems, with grape growers piling soils around the trunks of the vines in the winter. Both hybrids, such as Seyval Blanc and Vidal, and cool climate *V. vinifera* varieties, such as Riesling, Chardonnay and Cabernet Franc, are commonly planted.

26.2. Wine Law and Wine Business

Before the New York Farm Winery Act of 1976, production in New York was dominated by a few large wineries that were producing large volumes of inexpensive wines, often from American vine species. The Act (and an amendment in 1978) allowed wineries to sell wines they had vinified directly to consumers, subject to a maximum of 50,000 US gallons (190,000 L) annually. This law completely changed the dynamics of the industry. Many new, mainly small, wineries were established, now with a viable way to market. These small producers used French hybrids and *V. vinifera* and raised the quality of wine. With such competition, the larger wineries have either adapted or declined. Most sales continue to be through cellar doors and the vast majority of wine is sold in-state. However, although the market for wine in the New York City metropolitan region is one of the world's most competitive and demanding, its own trade has been slow to embrace the state's wines.

Today, there are just over 470 wineries across the state.⁶ Many of the small wineries are now being run by a second generation of winemakers and there are increasing numbers of winemakers that have trained professionally and worked in other wine-producing countries, leading to greater quality and diversity.

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- 4 Long Island Region, New York Wine & Grape Foundation
- 5 *The Hudson River Region*, New York Wine & Grape Foundation
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