Research Focus

Note: This article was published in the March 2021 Issue of Appellation Cornell.

How Vineyard Acreage and Varieties in New York have Changed Since the mid-1950s.

By Tim Martinson

Since the early 1900s, agricultural statistics on grape acreage and production have been collected by the State of New York and the USDA’s National Ag Statistics Service – largely through their New York office. These publications included annual production statistics and vineyard and orchard acreage surveys at five-year intervals.

A look back at the past 70 years of production and 55 years of acreage statistics shows how the industry has changed from one dominated by large wine and juice producers, to a more diverse assemblage of a few large processors and over 400 small to mid-sized premium wineries.

70 Years of Change in New York

Here are some detailed snapshots of production trends from 1954 to 2018, and changes in acreage and varieties from 1966 to 2011.

1. Production 1996-2017. Tonnage rose from around 90,000 in the ‘50s to 150-180,00 tons by the early 80s– and remaining in that range through 2017. A rapid drop in demand for traditional NY wines in 1985 led to the dip in production through the late 80s. A couple of notable dips in production occurred in 1993 (following Mt. Pinatubo’s eruption and very cool season in 1992), and 2012 (major crop loss in western New York associated with early budburst and multiple spring freeze events).

Figure 1. Annual Grape Production in NY 1954-2017
2. Acreage Trends 1996-2011. Acreage increased steadily through the 1960s, peaking in 1975 at 42,000 acres. Between 1980 and 1990, vineyard acreage dropped by 9,000 to 33,000 acres, where it remained through 2011. Concord acreage fluctuated much less, but declined from about 25,000 to 19,000 acres by 2011.

Figure 2. New York Total and Concord Acreage 1966-2011

3. Natives, Hybrids, V. vinifera production. Grape varieties planted in New York are categorized in three types: native (Labrusca-types), hybrids (including so-called “French Hybrids” and new releases from US breeding programs), and V. vinifera types. As of 2010 (the last year of acreage subtotals), Concords represented 75% of grape tonnage (120,000 T), and all the other varieties (other Labrusca wine grapes, hybrids and natives) comprised 25% (40,000 T) of total tonnage.

Figure 3. Annual Production (5 yr rolling average) of NY Grape Production in NY (Tons) 1954-2017

![Ny Grape Acreage and Breakdown by Type 1966-2011](image)

**Figure 4. NY grape acreage and breakdown by type 1966-2011**

5. **Non-Concord wine varieties.** If we look at non-Concord Labrusca, hybrids, and *V. vinifera*, we can see that there was a dramatic drop in Labrusca types (9,500 to 6,000 acres) from peak acreage in 1980 to 1990, and a more extended drop in hybrid acreage from its peak in 1985 (5,900 acres) to 4,000 acres in 1990, lowering to 2,500 acres in 2011.

![Acreage of Non-Concord Wine Grapes in NY 1966-2011](image)

**Figure 5. Acreage of wine varieties in NY**
6. Production trends - Concord and other Labrusca-types. Average Concord tonnage rose from 80,000 in 1954 to 120,000 in 1980, and has remained steady through 2010, despite a drop in acreage from 26,000 to 20,000. Non-Concord Labrusca production rose from 10,000 to 30,000 tons by 1980, and declined slightly to 25,000 tons by 2010.

Figure 6a. Annual production of Concord grapes 1954-2010 (tons)

Figure 6b. Annual NY production of non-Concord, Labrusca-type grapes 1954-2010 (tons)
7. Production trends - Hybrids and *V. vinifera*. Interspecific hybrid varieties (initially named “French Hybrids”) started being planted in the Early 1960s. Production rose to 18,000 tons by the mid 1980s, then decreased to around 8,000 tons in the mid 2000s. Plantings of new varieties from Cornell University and the University of Minnesota breeding programs by 2010 added an additional 2000 tons by 2011. *V. vinifera* production rose from miniscule in 1980 to 10,000 tons by 2011.

**Figure 7a.** Annual NY production of hybrid grape varieties, 1954-2010 (tons)

**Figure 7b.** Annual production of *V. vinifera* grapes in NY 1954-2010 (tons)
Drilling down to specific varieties.

8. Non-Concord Labrusca types. Production and acreage of Catawba, Delaware, and Ives, mainstay of traditional NY wines made by major processors such as Gold Seal, Taylors, and Canandaigua wineries, rose from the 50s to the 1980s, and then declined rapidly by 1990, and declined more slowly afterwards. Perhaps the most dramatic change was with Delaware, which declined from a peak of 2000 acres and 5,000 tons in 1980 to 168 acres and 350 tons by 2010. Elvira acreage remained constant around 600, but production doubled from 2,500 tons in 1980 to 5,000 tons in 2010. Niagara acreage increased from 2000 acres in 1990 to 3500 acres by 2005 in response to a planting program by National Grape Cooperative (Welch’s), and other cooperatives that ran for ten years starting in the early 90s.

Figure 8a. Acreage of selected Labrusca-type varieties in NY 1996-2011

Figure 8b. Production trends for major Labrusca wine varieties in NY 1954-2010 (5 year rolling average, tons)
9. **Selected “French Hybrid” varieties.** Following their introduction in the early ‘50s, interspecific hybrids (so-called “French Hybrids”) were not tracked individually. Most didn’t have names, but were tracked by the hybridizer’s name (eg. “Seibel”, “Baco”) and numbers, much like rootstocks. They were named in 1970 by the Finger Lakes Winegrape Growers Association. The top four French hybrids (Aurore, DeChaunac, Baco Noir, and Seyval blanc) reached their peak between 1975 (Baco noir) and 1985 (Seyval blanc and Aurore). Aurore acreage dropped precipitously from 1,800 to 600 acres, and production also fell by two-thirds, from 9,000 tons in 1985 to 3,100 tons in 2003, remaining level through 2010. Red varieties Dechaunac and Baco noir acreage and production declined through the mid-1990s, then leveled off as markets for red wines rebounded. Cayuga White, Cornell University’s first wine grape variety, showed steady increases in acreage from 100 in 1980 to 400 by 2010.

**Figure 9a. Acreage of selected hybrid varieties in NY 1966-2011**

**Figure 9b. Annual production of major hybrid varieties in NY, 1980-2010 (5 yr tolling average)**
10. The rise of *V. vinifera*. Production of *V. vinifera* varieties started in the late 1950s, led by Konstantin Frank and Charles Fornier of Gold Seal winery. But it wasn’t until 1980 that plantings (both in the Finger Lakes and on the North Fork of Long Island) started taking off. By 1985, there were 800 acres of Chardonnay and 400 acres of Riesling planted. Plantings of Merlot, mostly on Long Island, rose sharply from 100 acres in 1985 to 900 in 2005. Plantings of Cabernet Franc and Pinot noir followed. Production recorded rose from <200 tons in 1980 to 10,000 tons by 2010.

![Acreage of top V. vinifera Varieties in NY 1966-2011](image1)

**Figure 10a.** Acreage of top *V. vinifera* varieties in NY 1996-2011

![Annual production of V. vinifera grapes in NY 1954-2010 (tons)](image2)

**Figure 10b.** Annual production of *V. vinifera* grapes in NY 1954-2010 (tons)
Summary

11. Relative acreage of Non-Concord Labrusca, Hybrids, and \textit{V. vinifera}. Acreage statistics from 1966 to 2011 form a snapshot of changes in the NY wine industry. Production of traditional wine varieties such as Catawba and Delaware increased rapidly through the late 1970s. The introduction of “French Hybrids” in the late ‘50s represented a major diversification, providing new options for major producers such as Taylors, Widmer’s, Gold Seal, and Canandaigua – and acreage increased dramatically through 1980.

The industry reached a crossroads in 1985 as consumer demand shifted and major processors dramatically reduced purchases of bulk native and hybrid varieties – and grape prices nosedived. By 2011, acreage of non-Concord Labrusca declined by 50% from 9,500 acres to 5,000 acres, and traditional hybrids declined by 54% from 5,500 to 2,500 acres.

But following the passage of the NY farm winery act in 1976, a modest amount of production shifted from bulk processors to small wineries. \textit{V. vinifera} plantings surged from close to zero in 1980 to over 4,000 acres in 2011 – led by small and medium-sized wineries. As of 2011, 42% of wine grape acreage was still utilized by major producers such as Constellation brands (dominated by Catawba and Elvira), 20% by hybrids (dominated by Aurore) to both major processors and small wineries, and 35% of New York non-Concord wine varieties were \textit{V. vinifera} cultivars (divided almost equally between the Finger Lakes Region and Long Island).

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{NY_Acreage_of_Non-Concord_Labrusca_Hybrids_and_V_vinifera_1966-2011.png}
\caption{NY Acreage of Non-Concord Labrusca, Hybrids and \textit{V. vinifera} 1966-2011}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{%_of_NY_Wine_Grape_Acreage_in_Non-Concord_Labrusca_Hybrid_or_V_vinifera_varieties.png}
\caption{\% of NY Wine Grape Acreage in Non-Concord Labrusca, Hybrid or \textit{V. vinifera} Varieties}
\end{figure}
12. Top 10 varieties in New York in the 2011 Vineyard Acreage Survey

As of the 2011 survey, native Labrusca varieties Concord, Niagara and Catawba, ranked as the top 3 varieties grown in New York. Concord (20,000 acres) still comprised 62% of New York grape acreage, with about 10% of its production going into wine and 90% into grape juice. Niagara (2,800 acres, 8%) was in second place, with its use mostly in juice processing. Catawba (3rd) continued to be used in several bulk winery blends—and notably a very popular new wine produced by Hazlitt 1852 Vineyards called “Red Cat”. But *V. vinifera* varieties Riesling, Chardonnay, and Merlot occupied the next three ranks. Aurore and Elvira were ranked 7th and 8th, respectively, while Cabernet Franc and Cayuga White rounded up the top 10.

Table 1. Top 10 grape varieties (acreage) in production in New York, 2011.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variety</th>
<th>Acreage in 2011</th>
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<tbody>
<tr>
<td>1</td>
<td>Concord</td>
<td>18,883</td>
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<tr>
<td>2</td>
<td>Niagara</td>
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<td>3</td>
<td>Catawba</td>
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<td>4</td>
<td>Riesling</td>
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<td>5</td>
<td>Chardonnay</td>
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<td>6</td>
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<tr>
<td>7</td>
<td>Aurore</td>
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<tr>
<td>8</td>
<td>Elvira</td>
<td>631</td>
</tr>
<tr>
<td>9</td>
<td>Cabernet Franc</td>
<td>495</td>
</tr>
<tr>
<td>10</td>
<td>Cayuga White</td>
<td>385</td>
</tr>
</tbody>
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(Accessible top 10 table here)

The Present and Future

The New York wine and grape industry is dynamic. The number of wineries has increased from 285 in 2011 to over 400 today. After several years of stagnant demand, the Concord and Niagara juice market has seen a new processor enter the field. Prices are up and inventories down following strong sales in 2020. However, with the discontinuation of the acreage survey in 2011, and the annual production survey in 2018, we don’t know how much the acreage and production has recently changed in New York State. Unless acreage and production surveys are reinstated, we won’t have reliable information on trends shaping the industry’s future.

Tim Martinson is a senior extension associate and leader of the statewide viticulture extension program, based at Cornell AgriTech in Geneva, NY

References