Chapter 9. Fruit

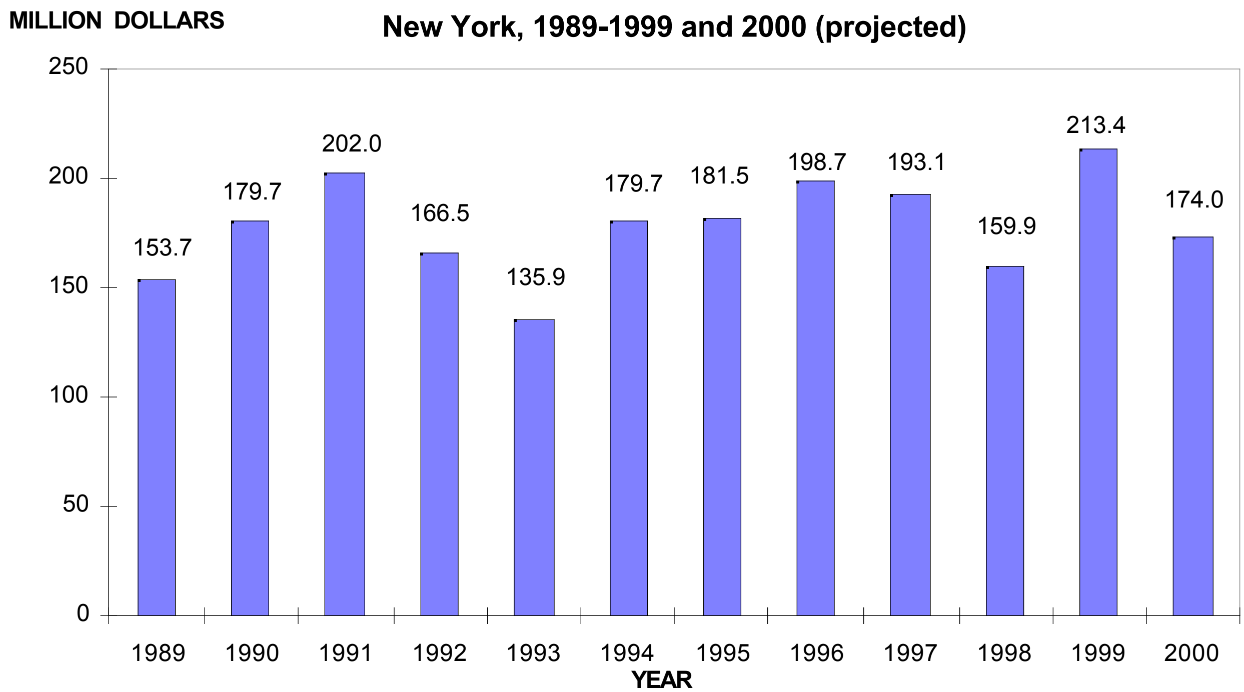
Gerald B. White, Professor

The total production of the six tree and vine crops which are important to New York's agricultural economy was projected to increase by 10 per cent nationally. The national production of apples, grapes, tart cherries, and peaches were forecast to increase compared with last year's production, while decreased production was indicated for pears and sweet cherries. The national production of apples was forecast at 254 million bushels, up one percent from 1999. Grape production was expected to total 7.5 million tons, an increase of 20 percent from last year's crop. If realized, grape production will surpass the record crop of 7.3 million tons in 1997.

In New York, apple production is indicated to be 24.3 million bushels, down 19 percent from last year's huge crop. Indicated production is nine percent below the average production of the last 5 years. Grape production of 165 thousand tons was estimated, 20 percent below last year's record crop. Total production of the six major fruit and vine crops of 703 thousand tons is projected for the State, down 19 percent from the previous year. Total production, which was the highest in several decades in 1999, is the lowest since the extremely short crop year in 1993.

The utilized value of the major fruit tree and vine crops in New York for the last ten years and the projected value for 2000 is shown below. With much smaller apple and grape crops and similar prices for grapes, but lower prices for processed apples, the value of the state's major fruit tree and vine crop is projected at $174 million, well below the record $213 million realized in '99.

FIGURE 9-1. VALUE OF PRODUCTION OF MAJOR TREE FRUIT & VINE CROPS
New York, 1989-1999 and 2000 (projected)



Source: New York Agricultural Statistics, 1999-2000

TABLE 9-1. COMMERCIAL NONCITRUS FRUIT PRODUCTION
New York and United States

	New York				United States			
Fruit	1997	1998	1999	2000*	1997	1998	1999	2000*
	- thousand tons -							
Apples	560	535	630	510	5,162	5,823	5,290	5,339
Grapes	139	128	205	165	7,291	5,820	6,230	7,487
Tart Cherries	7	7	9	7	146	174	128	127
Pears	8	12	13	14	1,043	970	1,020	1,001
Peaches	6	5	7	6	1,312	1,200	1,262	1,339
Sweet Cherries	1	1	1	1	226	211	229	224
Total New York's								
Major Fruit Crops	721	688	865	703	15,180	14,198	14,159	15,517

*indicated

TABLE 9-2. AVERAGE FARM PRICES OF NONCITRUS FRUITS
New York and United States

	New York				United States			
Fruit	1996	1997	1998	1999	1996	1997	1998	1999
	- dollars per ton -							
Apples								
Fresh	354	352	316	330	416	442	346	424
Processed	190	166	160	134	171	130	95	121
All Sales*	270	252	228	228	318	308	244	296
Grapes	257	292	316	290	429	429	455	483
Tart Cherries	288	346	360	314	322	318	290	418
Pears	383	384	375	388	376	276	291	294
Peaches	696	922	832	908	382	354	384	380
Sweet Cherries	1,420	1,720	2,070	1,490	1,470	1,250	1,090	1,090

TABLE 9-3. VALUE OF UTILIZED PRODUCTION, NONCITRUS FRUITS
New York and United States

	New York				United States			
Fruit	1996	1997	1998	1999	1996	1997	1998	1999
	- million dollars -							
Apples								
Fresh	88.5	91.5	66.4	97.4	1,289	1,288	1,111	1,266
Processed	50.4	49.8	43.2	42.9	353	288	206	268
All Sales*	138.9	141.3	109.6	140.2	1,641	1,575	1,316	1,534
Grapes	47.2	40.0	39.4	59.2	2,376	3,126	2,644	3,011
Tart Cherries	2.0	2.3	2.2	2.7	42	45	44	53
Pears	5.7	3.1	3.8	4.4	308	288	282	299
Peaches	4.0	5.3	3.5	5.4	389	444	447	463
Sweet Cherries	0.9	1.1	1.3	1.5	223	279	226	248
Total New York's								
Major Fruit Crops*	198.7	193.1	159.8	213.5	4,979	5,758	4,960	5,608

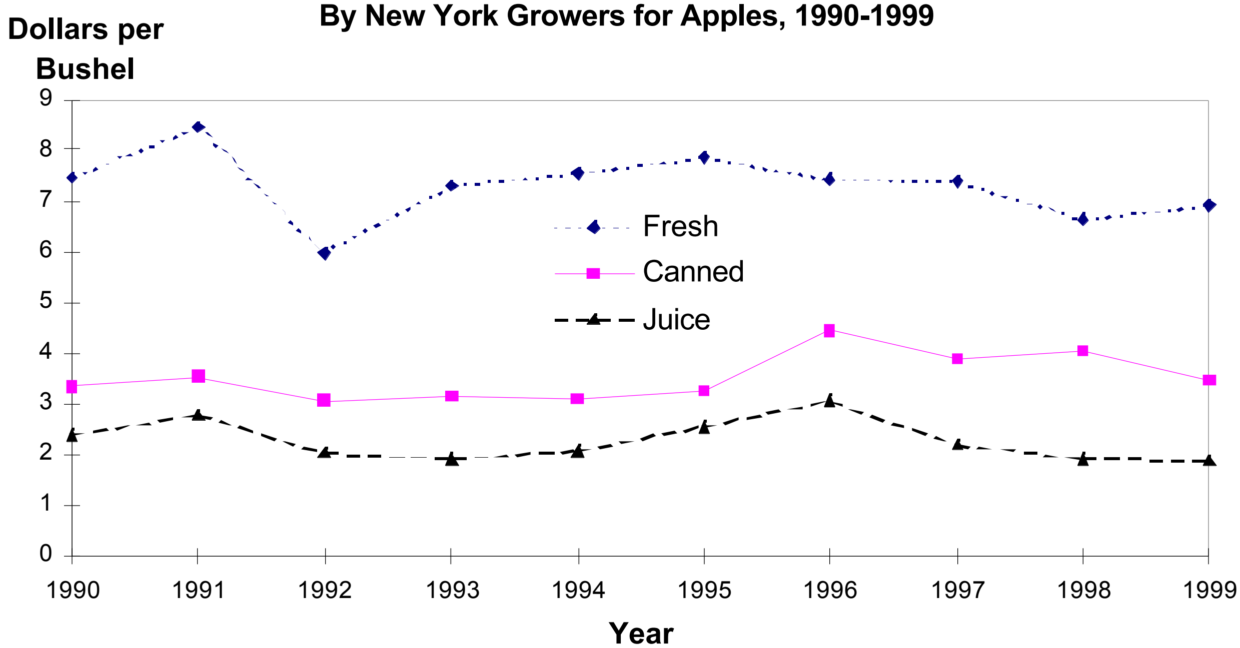
*May not add from total of fresh and processed due to rounding errors.
Source: NASS, USDA, Noncitrus Fruits and Nuts 1999 Summary, July 2000.

TABLE 9-4. APPLE PRODUCTION, UNITED STATES, 1995-1999, Five-Year Average Production, and 2000 Forecast 1,000 42-Pound Bushels

States/Regions	5-Year Average 1995-1999*	1999*	2000 USDA Estimate**	2000 Compared to USDA 5-Year Average % Change	2000 vs. 1999 % Change
Maine	1,479	1,714	833	-43.6	-51.4
New Hampshire	886	1,036	810	-8.6	-21.8
Vermont	1,119	1,429	1,190	6.4	-16.7
Massachusetts	1,317	1,548	1,190	-9.6	-23.1
Rhode Island	77	86	67	-13.0	-22.2
Connecticut	500	548	524	4.8	-4.3
New York	26,619	30,000	24,286	-8.8	-19.0
New Jersey	1,405	1,190	1,310	-6.8	10.0
Pennsylvania	11,076	12,024	11,429	3.2	-5.0
Maryland	870	905	905	4.1	0.0
Virginia	7,548	8,571	8,095	7.3	-5.6
West Virginia	3,048	3,452	2,143	-29.7	-37.9
North Carolina	4,748	4,524	4,524	-4.7	0.0
South Carolina	1,081	762	550	-49.1	-27.8
Georgia	395	286	310	-21.7	8.3
Total East	**62,308**	**68,074**	**58,164**	**-6.7**	**-14.6**
Ohio	2,143	2,381	2,143	0.0	-10.0
Indiana	1,368	1,436	1,071	-21.7	-25.4
Illinois	1,479	1,393	1,714	15.9	23.1
Michigan	24,429	28,810	21,429	-12.3	-25.6
Wisconsin	1,460	1,843	1,595	9.3	-13.4
Minnesota	541	593	524	-3.3	-11.6
Iowa	256	262	286	11.5	9.1
Missouri	981	1,167	810	-17.5	-30.6
Kansas	118	171	167	41.1	-2.8
Kentucky	258	214	214	-16.8	0.0
Tennessee	281	226	214	-23.7	-5.3
Arkansas	159	129	171	7.8	33.3
Total Central	**33,472**	**38,624**	**30,338**	**-9.4**	**-21.5**
Total East & Central	**95,780**	**106,698**	**88,502**	**-7.6**	**-17.1**
Colorado	895	190	905	1.1	375.0
Utah	781	214	1,071	37.2	400.0
Idaho	2,881	1,667	4,524	57.0	171.4
Washington	128,333	119,048	135,714	5.8	14.0
Oregon	3,743	3,571	4,167	11.3	16.7
California	21,176	19,643	17,381	-17.9	-11.5
Arizona	1,125	817	1,952	73.5	139.1
Total West	**159,054**	**145,198**	**165,714**	**4.2**	**14.1**
TOTAL U.S.	**254,834**	**251,895**	**254,217**	**-0.2**	**0.9**
TOTAL NORTHEAST	**48,537**	**53,931**	**44,686**	**-7.9**	**-17.1**

*1999 and 5-year average production from NASS, USDA, Non-Citrus Fruits and Nuts Summary July 2000.
**NASS, USDA, Crop Production, October 10, 2000.

FIGURE 9-2. AVERAGE ANNUAL PRICES RECEIVED
By New York Growers for Apples, 1990-1999



Source: New York Agricultural Statistics, 1999-2000.

Over the past decade until 1996, prices for processed apples had been fairly constant, while fresh apple prices had more pronounced fluctuations due to particular supply and demand conditions in a given year. In 1996, prices for canned and juice apples increased dramatically while the price for fresh apple decreased. The value of the 1996 apple crop was 138.9 million dollars, buoyed by record prices for processed fruit. In 1997, prices fell to more normal levels, but the value of the crop increased to a record 141.3 million dollars due to the large crop. In 1998, the value of the crop decreased to 109.6 million dollars due to a short crop as well as lower prices for both fresh apples and juice apples. In 1999, the largest crop since 1926 pushed up the crop value to $140 million, despite soft prices, especially for processed apples.

In October 2000, the average price for fresh apples in New York State was 20.3 cents per pound, 19 per cent above last year. In November, prices softened. Exports of fresh apples (both volume and prices) were running ahead of last year at the beginning of the season. Large crops in Italy and France, as well as a record crop for the entire EU, and the strong value of the dollar in relation to the British pound are factors that will affect export potential. With strength in smaller markets other than Great Britain, exports may increase slightly above last year's shipments of 872 thousand cartons. For the entire season, New York's average price for fresh apples will probably increase to 17.5 cents per pound, six percent above last year.

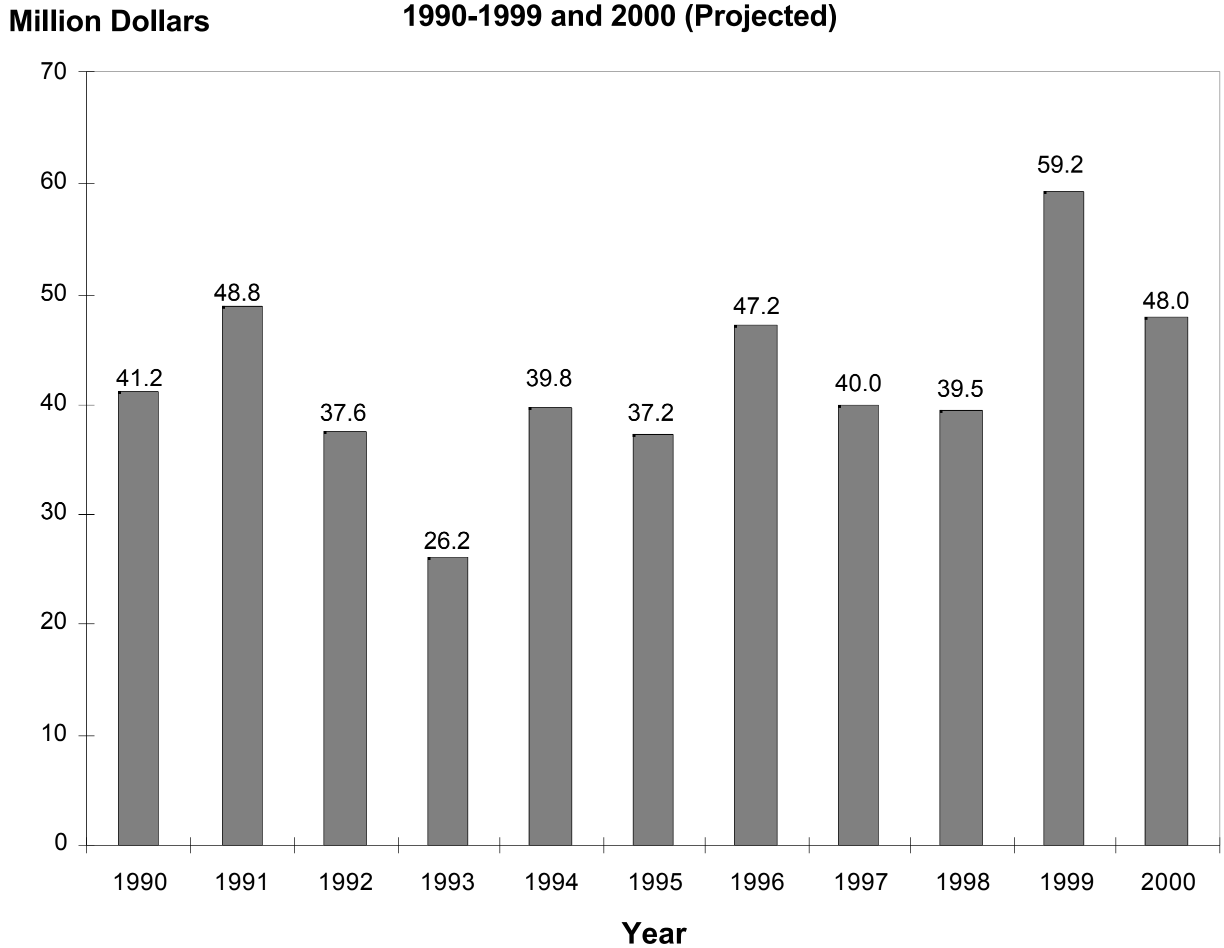
Announced processing apple prices in 2000 were down for peelers, from five to fifteen percent depending upon variety and grade. Juice apples in the fall were being sold for 3 to 5 cents per pound. With extremely low world market prices for concentrate (some European concentrate is now as low as $5 per gallon), juice prices are unlikely to average more than the 4.5 cents per pound for the '99 crop. Furthermore, hail affected an estimated 7000 acres of apples in the Hudson Valley, resulting in some fruit being unharvested, some diversion from fresh to juice, and lower packouts. Overall apple growers can expect decreased revenue compared with last year's crop. Net income will be down for both Western New York (due to the processed price situation) and in the Hudson Valley (due to the effects of hail damage). Champlain Valley growers may have improved net income over last year. The total value of the crop is projected at $111 million, about 20 percent below last year's crop value. (The assistance of

Alison DeMarree, Area Specialist, Cornell Cooperative Extension, is acknowledged for this section of the handbook.)

Grapes

The New York grape crop this year is projected to be 165,000 tons, an average crop considering the last five years, but 20 percent below the record crop of last year. Market conditions were generally favorable for both juice and wine grape growers. When the final crop value estimate is available, it will likely show a crop value of $48 million, well below the record value of $59.2 million realized in 1999.

FIGURE 9-3. VALUE OF UTILIZED PRODUCTION OF GRAPES 1990-1999 and 2000 (Projected)

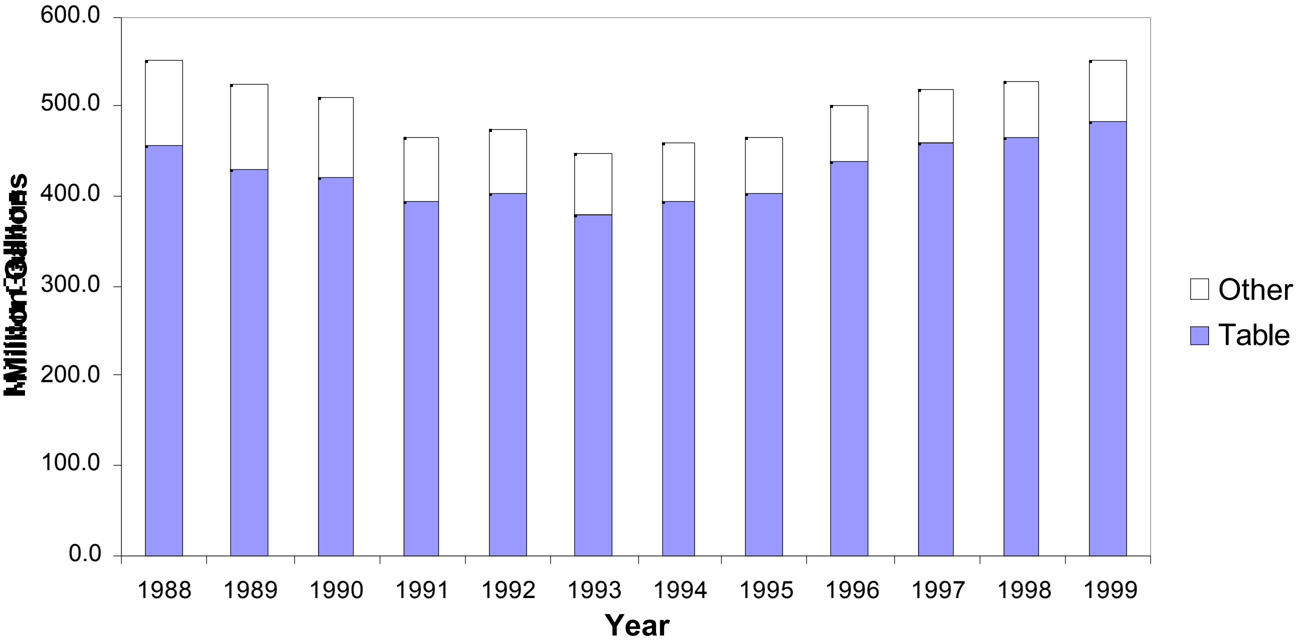


Source: New York Agricultural Statistics, 1999-2000.

Total wine consumption in 1999 increased 4.8 percent. Increased consumption was driven by the sixth consecutive gain in the table wine category. Along with continued strong growth in table wine, sparkling wine and champagne also experienced increases in '99 due to end of the millennium celebrations. Favorable publicity given to research showing positive health benefits from regular, moderate wine consumption has undoubtedly caused increased consumption. Final consumption figures for 2000 will likely show a very strong growth in U.S. wine consumption of about six percent.

In the current market, consumers are image and brand conscious. That fact, coupled with a strong economy, has meant that consumers are willing to spend more for wine and other products that have prestige value. In addition to the growth in fruit flavored varietals, the market for wines priced at $10 and over remains strong. In fact, there is now a growing demand for wines priced at $25 and over a bottle, although this is still a miniscule percentage of the total volume. If the US economy remains strong, wine priced at these ultra premium levels offer an opportunity for wineries in New York which can attain the highest level of quality for selected *vinifera* varieties (e.g. Pinot Noir).

FIGURE 9-4. TOTAL WINE CONSUMPTION, U.S.
1988-1999



Source: Wine Institute/Gomberg, Fredrickson and Associates

Concords are the predominant variety grown and processed in New York. There were 154,500 tons of Concords from New York processed in 1999, 31 percent above the average of the past five years (see page 9-7). Over the past five years, Concords have comprised 73 percent of total tonnage utilized. The second leading variety is Niagara with 8.3 percent of tonnage followed by Catawba with 5.2 percent. *Vinifera*, with an average of just 3,766 tons utilized, accounted for just 2.4 percent of the NY crush over the last five years.

The average price for French-American hybrids such as Aurore, de Chaunac, and Seyval has been flat to declining in recent years. The prices of other major French American varieties, such as Baco Noir, Cayuga White, and Rougeon, have been increasing due to the strong growth in the small winery sector. Native American varieties used for juice (i.e. Concord and Niagara) are in a cycle of relatively high prices, while American varieties used primarily in wine (such as Catawba and Elvira) were sold at somewhat lower prices.

Vitis Vinifera prices are heavily influenced by Riesling and Chardonnay, which are harvested in larger quantities than other *vinifera* varieties. Most Riesling and Chardonnay sold in the $1,000 - 1,450 per ton range in 1999, while red *vinifera* generally brought $1,100 - 1,700 per ton. Hence, the average *vinifera* price in 1999 was $1,290, a 5 percent increase from ’98 prices.

TABLE 9-5. GRAPES: NEW YORK GROWN

Received By Wineries and Processing Plants, 1995-1999

Variety	1995	1996	1997	1998	1999	5-Year Avg.
	- - - - - -	- - - - - -	- - - - - -	tons - - - - - -	- - - - - -	- - - - - -
Concord	111,000	139,000	96,600	89,400	154,500	118,100
Niagara	15,600	10,700	12,800	10,000	17,200	13,260
Catawba	8,700	7,900	7,335	6,090	9,600	7,925
Elvira	4,600	5,100	4,110	3,080	4,540	4,286
Delaware	2,350	1,650	1,010	550	1,180	1,348
Dutchess	250	120	***	***	***	***
Ives	***	***	130	115	210	***
Aurora	5,250	4,900	3,295	4,080	4,240	4,353
de Chaunac	1,450	910	575	710	940	917
Baco Noir	1,300	1,200	670	890	730	958
Seyval Blanc	900	900	600	650	850	780
Cayuga White	740	1,000	630	840	860	814
Rougeon	800	720	585	420	660	637
Vitis Vin.(all)	3,435	3,700	3,650	4,015	4,030	3,766
Other varieties	2,625	2,200	2,010	2,160	2,460	2,291
Total, all varieties	159,000	180,000	134,000	123,000	202,000	159,600

SOURCE: New York Agricultural Statistics, 1999-2000.

TABLE 9-6. GRAPES: PRICES PAID FOR NEW YORK GROWN GRAPES PROCESSED 1995-1999

Variety	1995	1996	1997	1998	1999	5-Year Avg.
American Varieties						
Catawba	210	215	220	245	243	227
Concord	205	207	257*	284*	266*	244*
Delaware	200	210	230	270	279	238
Dutchess	200	200	***	***	***	***
Elvira	210	215	215	240	238	224
Ives	***	***	300	370	384	***
Niagara	195	220	233*	265*	271*	237*
French American Hybrid						
Aurore	220	230	220	245	248	233
Baco Noir	260	280	330	395	409	335
Cayuga White	240	270	335	390	401	327
de Chaunac	250	280	315	375	285	301
Rougeon	270	280	320	380	404	331
Seyval Blanc	280	290	335	360	346	322
Vitis Vinifera						
All varieties	980	1,130	1,240	1,230	1,290	1,174
TOTAL	222	249	281	313	287	270

*Preliminary estimates of future payments by cooperatives have been included based upon historical data.
SOURCE: Fruit, 975-2-00, NY Agricultural Statistics Service.

The national crop of Concords and Niagara grapes decreased in 2000 after the huge '99 crop. Washington State Concord production was close to average, and New York production fell considerably.

National Grape, which processes about 30 per cent of the total NY grape crop, paid a harvest cash advance of $100 per ton for the third consecutive year. Favorable publicity about the health benefits of grape juice has caused strong demand for Concords grapes. Cash prices were slightly lower than last year, in the $245-$260 range. Although earnings from the 2000 crop for juice grape growers will fall by perhaps 20 percent, cash flow will be strong because cooperative growers will be receiving big payments from the huge '99 crop.

For growers selling to large wineries, prices were similar to last year. Canandaigua Wine Company (the major purchaser of the State's wine grapes) listed slightly lower prices for Aurore, Catawba, Concord Niagara, and white hybrids. Delaware and red hybrids were unchanged. Canadaigua did, however, offer a slightly higher price for Elvira. Thus the overall average price for native varieties and hybrids, when weighted by volume of purchases from the largest winery, will be close to last year's average.

The small winery sector of the State's grape industry continued its strong performance. The average price for *vinifera* grapes will probably increase about one percent to a record $1300 per ton. Although there will be considerably less grapes to process this year, it will be a good year for the state's small wineries. Winery visitation is increasing significantly for most wineries, and the money spent per visitor is also increasing. Small wineries with quality wines and good marketing skills will again experience strong sales growth for the year 2001. (The assistance of Barry Shaffer and Tim Martinson, area Extension Educators in the Lake Erie region and the Finger Lakes region, is acknowledged for this section of the handbook.)

Source: New York Agricultural Statistics, 1999-2000.

FIGURE 9-5. AVERAGE PRICE FOR GRAPES IN NEW YORK 1990-1999