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THE OUTLOOK FOR FRUIT IN THE NORTHEAST, 1983-84

BY

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by G.B. White*

As was noted in the 1981 outlook presentation (White), there were some imbalances in supply and demand for apples, tart cherries, and grapes which had the potential for causing difficulties for Northeastern fruit growers in the next few years. Each of these commodities have experiences very unprofitable years in either 1982 or will feel the pinch in the 1983/84 season due to very low prices in comparison to recent historical price levels. Furthermore, the situation has been further clouded by the recession of the past two years, high real interest rates, and the strong U.S. dollar which has led to international trade difficulties.

I shall review data from the five major tree fruit crops produced in the Northeast, as well as grapes, blueberries, strawberries, and cranberries. I shall attempt to point out some of the factors which will have a bearing on prices and growers' incomes, and will discuss prices where reported data are available.

Apples

Some significant changes in the apple industry were noted in the 1981 presentation (White). These included replanting of old orchards, planting orchards on previously bare land (especially in the West), and the use of size controlled rootstocks and higher density plantings which begin bearing sooner, produce a higher yield of higher quality fruit, and permit improved labor efficiency. Continued expansion of controlled atmosphere (CA) storage, as well as new developments in CA technology, has provided growers

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with an extended marketing season. Productive capacity has undoubtedly been improved with new plantings in the two leading producing states, Washington and New York. It has been widely predicted that, in the near future, Washington will have an 100 million bushel crop (currently their production is in the 60-70 million range). The New York Crop Reporting Service's Orchard and Vineyard Survey, 1980 estimated New York's apple acreage at 74,346, an 11 percent increase over the 1975 acreage. This marked the first time since the first survey was published in 1960 that apple acreage increased in New York.

For the 1982 season, Northeast growers experienced very low prices due to a fairly large crop nationally (193 million bushels) and a large crop in the Eastern states (76 million bushels, including 59 million bushels in the Northeast). Although the crop was far short of the record 1980 crop of 210 million bushels, several factors caused depressed prices. Exports of fresh market apples leveled off at 14 million bushels (Table 1) after reaching 16 million bushels in a five-year period of rapid growth ending in 1980-81. A large crop in Canada (24 million bushels - the third largest crop) coupled with the strong U.S. dollar resulted in reduced export opportunities in that country. Large reductions in exports also occurred in Europe and Central America. Other regional markets experienced little change, although there was much shifting around within countries. South Africa exported nearly .9 million bushels into the U.S., a half million bushels more than the exports from that country over the past three years. Other large exporters, in addition to Canada (1.7 million bushels), were Southern Hemisphere countries such as New Zealand (.8 million bushels), and Chile (.8 million bushels). France, with nearly .4 million bushels exported, was about a quarter of a million bushels over their usual level.

In the processing apple sector, imports have grown steadily, mainly

imports of single-strength apple juice concentrate (Table 2). These imports have increased by more than a factor of three since 1977/78. These imports can be attributed to increased juice plant capacities and fruit production capacity in countries such as Argentina and West Germany; the strong U.S. dollar; and the increased demand for apple juice in the U.S. market. Per capita consumption of apple juice (Table 3) has grown from just under four pounds to 11 pounds in the past 10 years. This increase has helped to offset decreased consumption of canned apples (mainly apple sauce) and frozen apples. Increased consumption of juice has led to an apparent slight increasing trend to total per capita consumption. Fresh consumption has fluctuated, usually in the 16-18 pound range. The percentage utilization of domestic apples for juice has remained nearly constant at 22-24 percent of production over the past three years.

Another factor which has the potential to affect apple marketing in the next few years is new CA storage technology. Developments in storage by Frank Liu of the Pomology Department at Cornell has increased the quality of McIntosh apples held in storage in spring and summer. The procedure developed by Liu involves harvesting apples at optimum maturity, as determined by the internal ethelene changes in apples. When the fruit is placed in CA storage, ethelene gas is removed so that it does not accumulate at any significant level. This procedure, which is being tested commercially by New York growers, considerably improves the storing of McIntosh apples, the predominant variety in New England. McIntosh apples have a relatively poor storage performance for CA. However, the same technology can eventually be used for other varieties and by growers of other states and regions, and gives the potential to hold over part of the crop longer into the new season, especially when a short crop is anticipated. This has some important implications for production areas or varieties which hit the

market early. In fact, in recent years, Southern growers, who traditionally received excellent prices for early Red Delicious apples, have been competing head-on with Washington apples from the previous season. The development of CA storage technology will continue to squeeze areas with smaller volume production, relatively low quality apples, or a predominance of early varieties.

What can growers look for in the 1983/84 marketing season? The August 1 USDA 1983 crop estimate predicted a crop of 200 million bushels (Table 4), nearly four percent over the 1982 crop. The East (Northeast and Southeast) will again have a big crop, virtually unchanged from last year, with the Northeast expecting 57 million bushels, about three percent below 1982. Generally dry weather conditions up and down the Eastern seaboard have caused small fruit size except in Western New York which received timely rains which promoted good size development. Several states have rather large decreases from last year's production, including New Jersey (-28.6 percent), Connecticut (-20.0 percent), and New Hampshire (-10.7 percent). Among the states in the Northeast, only New York expects increased production.

The relatively large crop in the East, coupled with larger than normal inventory carry-overs of processing products, and small sized apples has depressed the processing market, especially for juice. Duffy-Mott, the largest processor New York, announced cash prices which were down slightly for the two smaller size grades. The juice apples were priced at 3.7¢ per pound. Other processors in the East were paying 3.2-3.3¢ per pound for juice apples.

Fresh market growers in the Northeast with good sized apples and relatively high production can expect a good marketing year. However, growers with reduced yields and/or small sized apples will not fare so well. That

description would appear to fit growers in the Hudson Valley (New York), New Jersey, Pennsylvania, Delaware, Maryland, and West Virginia. Prices for packed fresh apples, especially for cell packs and tray packs will be relatively strong. However, pack-out percentages will be low in these areas, leading to a higher percentage of juice apples and lower net returns. Growers who produce primarily for processing will continue to feel the squeeze from relatively stable or declining product prices, increased costs of production, and high real interest rates.

Peaches

The 1983 national peach crop was estimated at about 44 million bushels (Table 5), the smallest crop in recent years. This amount includes California clingstone peaches, which were estimated at 19.2 million bushels, down 17 percent from 1982. In addition to the decrease in the California clingstone crop, several other Southern states, including South Carolina and Georgia, experienced damaging spring frosts which greatly reduced production. The national freestone crop was estimated at 25.6 million bushels, slightly above last year's short crop. In a normal year, freestone peach production is about 30 million bushels.

In the Northeastern states, a crop of 5.7 million bushels, or an increase of about 26 percent, was estimated. All eight states which produce peaches in commercial quantities expected larger crops, with the largest producer, New Jersey, registering an expected increase of 38 percent. The large crop in the Northeast and the short crop nationally, and especially in the South, helped to bring good returns in 1983 for most growers in the Northeast.

Cherries

As noted in the Outlook in 1981 (White), productive capacity in tart cherries has increased considerably in the U.S. in recent years. That

production potential was realized in 1982 with a large national crop of 311 million pounds (Table 6), led by Michigan's production of 260 million pounds. Prices plummeted last year to a national average of 14¢ per pound, compared with 45¢ and 20¢ the previous two years. The situation was complicated by the administration's failure to act in a timely manner on the provisions for set-aside in the Tart Cherry Marketing Order.

This year was much brighter for growers both in the Northeast and nationally. National production is estimated at about 140 million pounds, down 55 percent from 1982. If the Michigan estimate was correct, the 1983 crop will be its smallest since 1963, due to frost damage in May. New York and Pennsylvania growers were selling tart cherries for about 45-50¢ per pound and with increased production in 1983, realized healthy revenues.

Sweet cherry production in the Northeast was estimated to increase by 15 percent in 1983 over the 1982 crop (Table 7), with both New York and Pennsylvania showing increased production.

Pears

The national pear crop is forecast at 794 thousand tons (Table 8), one percent below the 1982 crop. The Northeast expects a reduction of four percent from 1982. Pennsylvania's crop is considerably reduced from 1982, while New York's and Connecticut's production is virtually unchanged from a year ago. Price information is unavailable at this time.

Grapes

The national production forecast for grapes in 1983 is 5.3 million tons, down nearly 20 percent from 1982's record crop (Table 9). California's production is off about 23 percent from a year ago. Washington, with new plantings coming into production, has supplanted New York as the second leading state in total production. As noted in the 1981 outlook for grapes, this is another crop where supply is out of balance with demand.

Increasing production coupled with the strong U.S. dollar, has depressed prices for both processing and wine grapes and wines.

The 1983 crop for the Northeast will be 18 percent above a year ago with both New York (+15 percent) and Pennsylvania (+28 percent) expecting increases. National Grape expects abundant deliveries from the New York-Pennsylvania-Ohio area (National Grape Cooperative Association, Inc.) with crop projections of +29 percent for Concords and +15 percent for Niagaras. With a high production increase for Concords projected for Washington State (+45 percent), final prices for the 1983 crop will almost certainly be considerably lower than last year. National Grape announced a cash advance price of \$80 per ton compared with \$95 a year ago.

For wine grape varieties, a smaller California crop will help some, but the industry is facing tough times resulting from sluggish consumer demand, increased production, and the competition from imported wines. Imports have increased greatly with the strength of the U.S. dollar, especially as measured against the French and Italian currencies. There are a large number of small farm wineries in the East in their first year or two of operation. It has been a real struggle for these beginning wineries to gain a market and keep cash flow at an adequate level. Prices for wine grapes this fall were down considerably. The Taylor Wine Company 1983 prices and percentage decrease in prices from 1982 for a few varieties were as follows: \$165 per ton for Concords (-18 percent from 1982), \$300 for Marechal Foch (-25 percent), \$300 for Catawba (-14 percent), \$210 for Niagara (-35 percent), \$365 for Aurore (-14 percent), and \$425 for Seyval Blanc (-13 percent).

The grape growers from New York and Pennsylvania are vigorously searching for alternatives in terms of varieties and/or marketing outlets. There is rising interest in new table grape varieties being developed at

the New York Agricultural Experiment Station at Geneva. At the present time only 3,000 tons are estimated as sales of fresh grapes from New York State. The improving economy should help consumer demand, but the industry still faces rough times ahead.

Blueberries

A national estimate of blueberry production is not yet available. Both Maine and New Jersey crop estimates are for a 17 percent reduction in production from a year ago (Table 10).

Strawberries

The Northeast produces about three percent of the nation's strawberries, most of which is sold directly to consumers. Production has been 221-250 thousand hundredweight in recent years (Table 11), but estimates for 1983 are not yet available.

Cranberries

The cranberry crop is important in Massachusetts and New Jersey, bringing a value of utilized production of 59 million dollars and 14 million dollars respectively for these two states. National production is expected to increase slightly at one percent above a year ago (Table 12). Massachusetts expects about a two percent increase from a year ago while a 15 percent decrease is expected for New Jersey. These two states typically produce just over one-half of the nation's production.

REFERENCES

National Grape Cooperative Association, Inc., Co-op News, September 1983.

White, G.B. "The Outlook for Fruit in the Northeast." Staff Paper No. 81-23, Department of Agricultural Economics, Cornell University, September 1981. 23 pp.

TABLE 1. FRESH APPLE EXPORTS AND IMPORTS, THE UNITED STATES, 1975/76 - 1982/83 SEASONS, AND 1983/84 FORECAST.

<u>YEAR</u>	<u>EXPORTS</u>	<u>IMPORTS</u>
	(MILLION 42-POUND BUSHELS)	
1975-76	5.4	N.A.
1976-77	6.3	N.A.
1977-78	7.9	3.0
1978-79	7.5	2.9
1979-80	12.4	3.7
1980-81	16.0	4.1
1981-82	14.4	3.5
1982-83	14.3	4.6
1983-84 (FORECAST)	15.0	?

SOURCE: FOREIGN AGRICULTURAL SERVICE, HORTICULTURAL AND TROPICAL PRODUCTS DIVISION

N.A. = NOT AVAILABLE

TABLE 2. APPLE JUICE: IMPORTS INTO THE UNITED STATES, 1977/78 - 1982/83
SEASONS ¹

<u>SEASON</u>	<u>MILLION GALLONS²</u>
1977-78	41.6
1978-79	62.8
1979-80	45.9
1980-81	70.3
1981-82	76.4
1982-83	139.8

SOURCE: FOREIGN AGRICULTURAL SERVICE, HORTICULTURAL AND TROPICAL PRODUCTS
DIVISION

¹INCLUDES PEAR JUICE, BUT VOLUME IS BELIEVED TO BE NEGLIGIBLE.

²EXPRESSED IN SINGLE-STRENGTH (NATURAL JUICE) EQUIVALENTS.

TABLE 3. PER CAPITA CONSUMPTION OF APPLES AND APPLE PRODUCTS, 1973-82
(POUNDS FRESH WEIGHT EQUIVALENT)

<u>YEAR</u>	<u>FRESH</u>	<u>CANNED</u> ¹	<u>JUICE</u>	<u>FROZEN</u>	<u>DRIED</u>	<u>TOTAL</u>
1973	16.1	4.5	3.9	1.0	1.1	26.6
1974	16.5	4.2	3.9	.6	.9	26.1
1975	19.1	4.2	4.4	.8	1.0	29.5
1976	17.1	3.0	5.1	.7	1.1	27.0
1977	16.9	3.3	5.1	.7	1.0	27.0
1978	17.5	3.6	6.5	.7	1.0	29.3
1979	17.6	3.3	8.1	.6	1.0	30.6
1980	19.1	3.3	7.3	.6	1.0	31.3
1981	16.8	2.7	9.9	.6	1.1	31.1
1982(PRELIM)	17.9	2.7	11.0	.7	1.4	33.7

¹SAUCES AND SLICES.

SOURCE: USDA, ECONOMIC RESEARCH SERVICE.

TABLE 4. APPLE PRODUCTION, 1981, 1982, AND 1983 FORECAST, NORTHEASTERN STATES, WASHINGTON, AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983¹</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
	(1,000 42-POUND BUSHELS)			
CONNECTICUT	905	1,310	1,048	-20.0
DELAWARE	312	345	322	- 6.7
MAINE	1,905	2,119	1,952	- 7.8
MARYLAND	1,667	1,905	1,833	- 3.8
MASSACHUSETTS	1,976	2,381	2,262	- 5.0
NEW HAMPSHIRE	1,071	1,333	1,190	-10.7
NEW JERSEY	2,262	3,333	2,381	-28.6
NEW YORK	19,048	26,905	27,381	+ 1.8
PENNSYLVANIA	9,524	12,500	12,381	- 1.0
RHODE ISLAND	107	143	130	- 9.1
VERMONT	667	1,190	1,095	- 8.0
WEST VIRGINIA	4,762	5,714	5,476	- 4.2
NORTHEAST	44,206	59,178	57,451	- 2.9
WASHINGTON	65,714	61,905	70,238	+13.5
UNITED STATES	184,610	193,095	200,048	+ 3.6
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PERCENT NORTHEAST OF				
U.S. PRODUCTION	23.9%	30.7%	28.7%	

¹AUGUST 1 USDA ESTIMATE. THE OCTOBER 1 ESTIMATE WILL BE RELEASED OCTOBER 12, 1983.

TABLE 5. PEACH PRODUCTION, 1981, 1982, AND 1983 FORECAST, NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
	(1,000 48-POUND BUSHELS)			
CONNECTICUT	6	48	63	+31.2
DELAWARE	33	35	38	+ 8.6
MARYLAND	354	354	458	+29.3
MASSACHUSETTS	4	32	38	+18.8
NEW JERSEY	1,875	1,667	2,292	+37.5
NEW YORK	188	250	302	+20.8
PENNSYLVANIA	1,354	1,875	2,063	+10.0
WEST VIRGINIA	375	292	458	+56.8
 NORTHEAST	 4,189	 4,553	 5,712	 +25.5
 CALIFORNIA (CLINGSTONE & FREESTONE)	 34,084	 31,604	 28,334	 -10.3
 UNITED STATES (CLING- STONE & FREESTONE)	 57,971	 47,762	 43,955	 - 8.0
<hr style="border-top: 1px dashed black;"/>				
PERCENT NORTHEAST OF				
U.S. PRODUCTION	6.6%	8.9%	13.0%	

SOURCE: CROP REPORTING BOARD, SRS, USDA.

TABLE 6. TART CHERRY PRODUCTION, 1981, 1982, AND 1983 (INDICATED),
NORTHEASTERN STATES, MICHIGAN, AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
	(MILLION POUNDS)			
NEW YORK	7.0	21.0	23.0	+ 9.5
PENNSYLVANIA	8.0	5.5	6.5	+18.2
NORTHEAST	15.0	26.5	29.5	+11.3
MICHIGAN	88.0	260.0	80.0	-69.2
WISCONSIN	9.6	10.0	6.5	-35.0
COLORADO	1.6	.4	2.4	+500.0
OREGON	5.0	5.0	7.0	+40.0
UTAH	14.0	9.0	14.5	+61.1
UNITED STATES	133.2	310.9	139.9	-55.0
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PERCENT NORTHEAST OF				
U.S. PRODUCTION	11.3%	8.5%	21.1%	

SOURCE: CROP REPORTING BOARD, SRS, USDA.

TABLE 7. SWEET CHERRY PRODUCTION, 1981, 1982, AND 1983 (INDICATED),
NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
		(TONS)		
NEW YORK	1,750	3,500	4,000	+14.3
PENNSYLVANIA	300	600	730	+21.7
NORTHEAST	2,050	4,100	4,730	+15.4
MICHIGAN	23,000	33,500	20,000	-40.3
CALIFORNIA	32,750	11,400	11,000	- 3.5
IDAHO	3,100	2,700	2,900	+ 7.4
MONTANA	1,240	3,400	1,500	-55.9
OREGON	40,000	35,000	41,000	+17.1
UTAH	4,500	2,100	4,700	+123.8
WASHINGTON	46,400	66,000	67,000	+ 1.5
UNITED STATES	153,040	158,200	152,830	- 3.4
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PERCENT NORTHEAST OF				
U.S. PRODUCTION	1.3%	2.6%	3.1%	

SOURCE: CROP REPORTING BOARD, SRS, USDA.

TABLE 8. PEAR PRODUCTION, 1981, 1982, AND 1983 (INDICATED), NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
		(TONS)		
CONNECTICUT	1,600	1,550	1,580	+ 1.9
NEW YORK	17,000	19,000	19,000	0.0
PENNSYLVANIA	3,000	4,600	3,600	-21.7
NORTHEAST	21,600	25,150	24,180	- 3.9
CALIFORNIA	376,000	321,500	277,500	-13.7
COLORADO	7,000	2,700	5,300	+96.3
MICHIGAN	9,000	12,000	8,000	-33.3
OREGON	205,000	175,000	196,000	+12.0
UTAH	3,100	2,800	3,100	+10.7
WASHINGTON	275,300	265,800	280,000	+ 5.3
UNITED STATES	897,000	804,950	794,080	- 1.4
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PERCENT NORTHEAST OF				
U.S. PRODUCTION	2.4%	3.1%	3.1%	

SOURCE: CROP REPORTING BOARD, SRS, USDA.

TABLE 9. GRAPE PRODUCTION, 1981, 1982, AND 1983 (FORECAST), NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
		(TONS)		
NEW YORK	150,000	157,000	180,000	+14.7
PENNSYLVANIA	61,000	47,000	60,000	+27.7
NORTHEAST	211,000	204,000	240,000	+17.7
ARIZONA	12,400	13,100	13,500	+ 3.1
ARKANSAS	6,000	10,500	9,500	- 9.5
CALIFORNIA	3,993,000	6,138,000	4,740,000	-22.8
MICHIGAN	53,000	58,500	60,000	+ 2.6
OHIO	10,300	9,000	8,000	-11.1
WASHINGTON	159,000	168,900	225,000	+33.2
OTHER STATES ¹	12,900	12,200	13,400	+ 9.8
UNITED STATES	4,457,600	6,616,200	5,309,400	-19.8
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PERCENT NORTHEAST OF				
U.S. PRODUCTION	4.7%	3.1%	4.5%	

¹GEORGIA, MISSOURI, NORTH CAROLINA, AND SOUTH CAROLINA.

SOURCE: CROP REPORTING BOARD, SRS, USDA.

TABLE 10. BLUEBERRY PRODUCTION, 1981, 1982, AND 1983 (INDICATED),
NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
	(POUNDS)			
MAINE	21,746	35,925	30,000	-16.5
NEW JERSEY	28,000	30,000	25,000	-16.7
NORTHEAST	49,746	65,925	55,000	-16.6
UNITED STATES	N.A.	N.A.	N.A.	

SOURCE NEW ENGLAND CROP AND LIVESTOCK REPORTING SERVICE, SRS, USDA.

TABLE 11. STRAWBERRY PRODUCTION, 1981, 1982, AND 1983, NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>
	(1,000 HUNDREDWEIGHT)		
NEW JERSEY	43	49	N.A.
NEW YORK	110	125	N.A.
PENNSYLVANIA	68	76	N.A.
NORTHEAST	221	250	N.A.
CALIFORNIA	5,396	6,272	N.A.
UNITED STATES	7,397	8,779	N.A.

PERCENT NORTHEAST OF

U.S. PRODUCTION	3.0%	2.9%
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SOURCE: CROP REPORTING BOARD, SRS, USDA, VEGETABLES, 1982 SUMMARY -
ACREAGE, YIELD, PRODUCTION, AND VALUE.

TABLE 12. CRANBERRY PRODUCTION, 1981, 1982, AND 1983 (INDICATED),
NORTHEASTERN STATES AND THE UNITED STATES.

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>PERCENT CHANGE</u> <u>1982-83</u>
	(1,000 BARRELS)			
MASSACHUSETTS	1,172	1,278	1,300	+ 1.7
NEW JERSEY	228	295	250	-15.3
NORTHEAST	1,400	1,573	1,550	- 1.5
OREGON	96	65	85	+30.8
WASHINGTON	129	89	132	+48.3
WISCONSIN	968	1,200	1,185	- 1.3
UNITED STATES	2,593	2,927	2,952	+ 0.9

PERCENT NORTHEAST OF

U.S. PRODUCTION	54.0%	53.7%	52.5%
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SOURCE: NEW ENGLAND CROP AND LIVESTOCK REPORTING SERVICE, SRS, USDA.