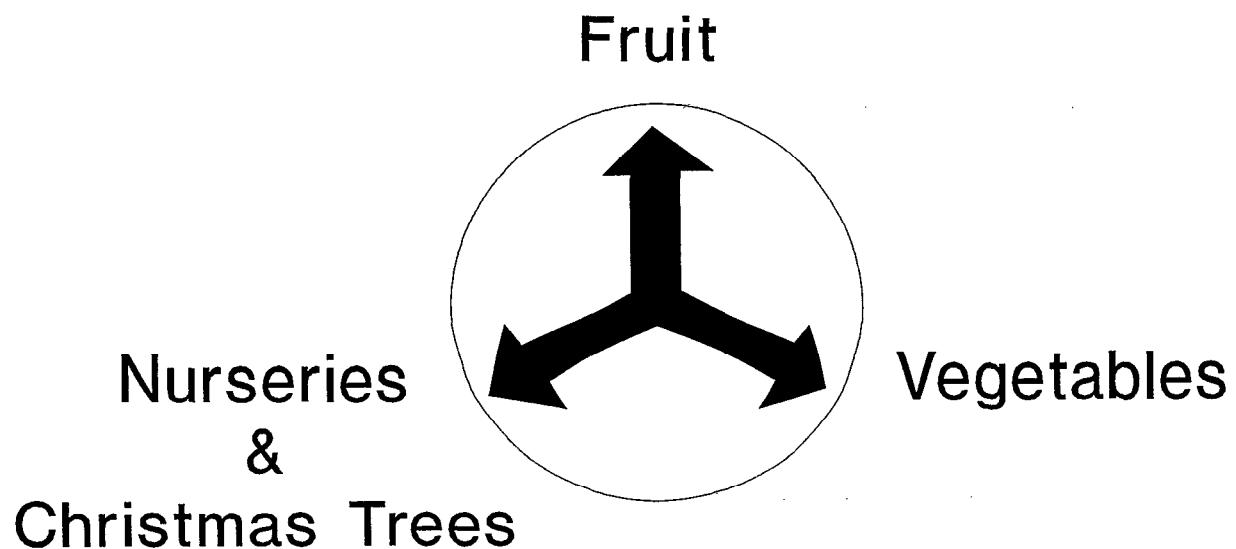


# **Michigan Rotational Survey**

## **Fruit-1991**



**Michigan Department of Agriculture**

**Michigan Agricultural Statistics Service**

STATE OF MICHIGAN



Commission of Agriculture  
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**DEPARTMENT OF AGRICULTURE**

P.O. BOX 30017, LANSING, MICHIGAN 48909

BILL SCHUETTE, Director

June 1993

I am pleased to present this final report on the 1991 Michigan Fruit Inventory Survey. This report represents a cooperative effort between the private and public sectors to provide critical data upon which Michigan's agricultural industry depends for future planning. Previous fruit surveys were conducted in 1982 and 1986.

This is the first report to be published under the new Specialty Crops Rotational Survey, which is funded by the legislature and administered by the Michigan Department of Agriculture (MDA). A vegetable inventory survey was conducted in 1992, with a nursery and Christmas tree survey scheduled for 1993. Continuing the rotational cycle, the fruit survey will be repeated in the fall of 1994.

MDA has continuously strived to improve the quality of data and accuracy of the surveys. At the request of the industry, the 1991 survey includes additional detailed data tables on rootstocks, year of planting cohorts and acreage by age groups. These improvements document recent changes in planting densities and orchard management techniques. You will also find enhancements in the formatting of tables, which makes them clearer and easier to read.

I sincerely appreciate the cooperation and assistance of all the growers who voluntarily provided the data that makes this report possible. I also extend thanks to fruit processors and other industry officials; the extension specialists at Michigan State University; data collectors at the National Association of the State Departments of Agriculture; and the staff of the Michigan Agricultural Statistics Service for their excellent support of the program.

I look forward to our continued successful relationship which brings us together for the benefit of Michigan's agricultural industry. If you have any questions regarding this survey, or suggestions for improvement, please contact the Michigan Agricultural Statistics Service at (517) 377-1831.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill".

Bill Schuette  
Director

# MICHIGAN

## ROTATIONAL SURVEY

### FRUIT 1991

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Cooperating

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This bulletin is provided free to Michigan farmers and reporting agribusiness firms. Others may obtain copies at \$5 each. Please make checks payable to USDA-NASS and send it with your request to P.O. Box 20008, Lansing, MI 48901-0608.

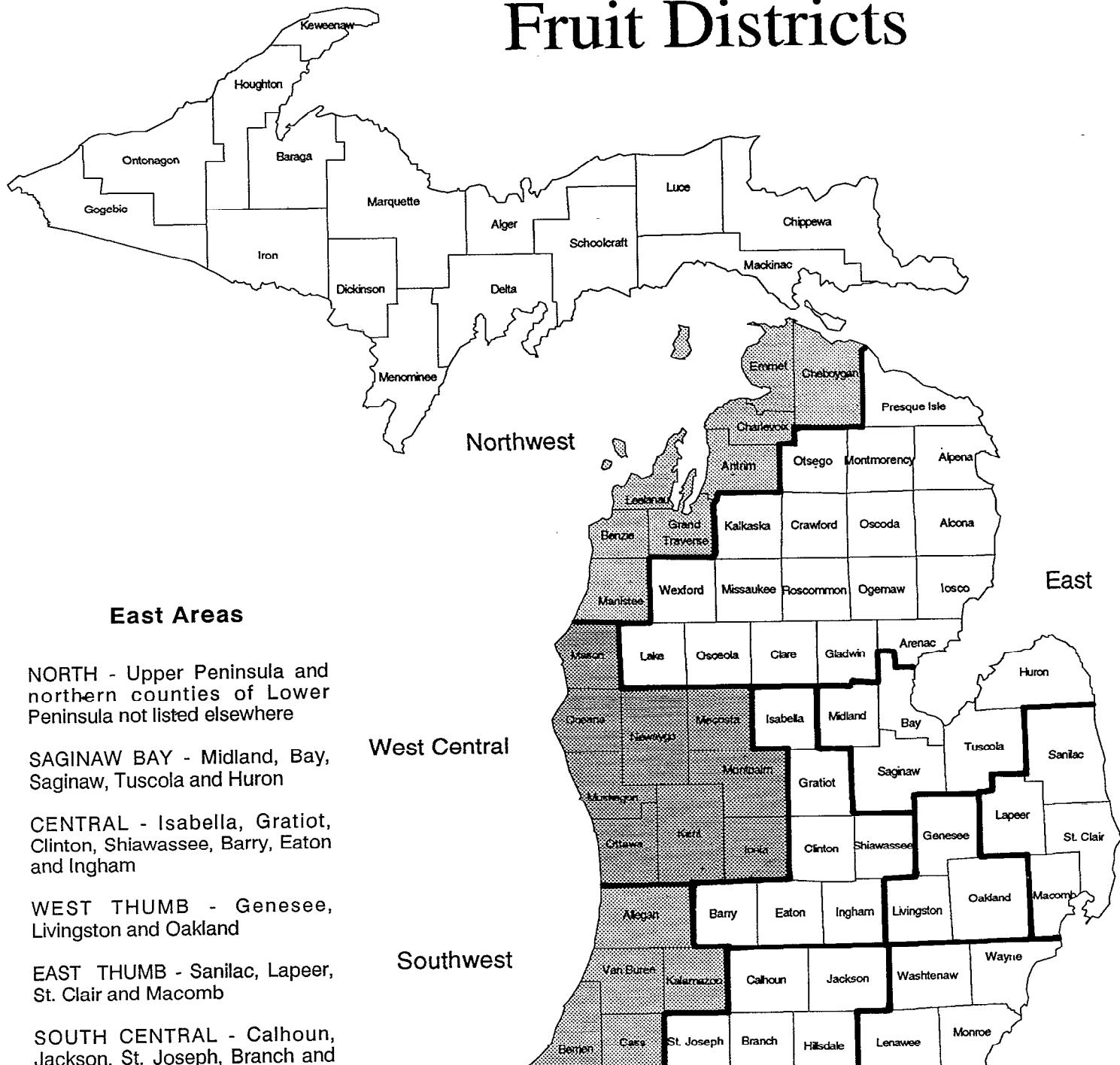
MASS-93-01

AUTHORITY:
Act 380 of 1965, as amended
TOTAL NUMBER OF COPIES PRINTED:
7,500
TOTAL COST: \$4,695.00
COST PER COPY: \$.6260

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# Fruit Districts



# ALL FRUIT

The total acres of fruit on commercial operations has stabilized since 1978 at about 150,000 acres. The number of operations growing fruit, however, has been declining. The 1991 total of 2,680 was down 12 percent from the 1986 count of 3,030. This, of course, means that fruit production has been becoming more concentrated. In 1982, for example, apple operations with 100 or more acres had 45 percent of the total acres. By 1991 that figure had risen to 54 percent.

The geographic concentrations of fruit varied substantially. The top five apple counties accounted for 56 percent of total acres. The comparable figures for tart cherries and blueberries were 72 percent and 95 percent, respectively. The counties with the most acres of fruit were, in order: Berrien, Van Buren, Leelanau, Oceana and Kent. They contained nearly 60 percent of the 147,000 acres of fruit in Michigan.

The densities of most tree fruit continued to rise. Since 1973 the trees per acre for apples has more than doubled—from 57 to 117. The trees per acre for apples planted from 1987-91 was 196, up from 156 for the previous 5-year cohort. The total tart cherry trees per acre has climbed over that period from 92 to 110.

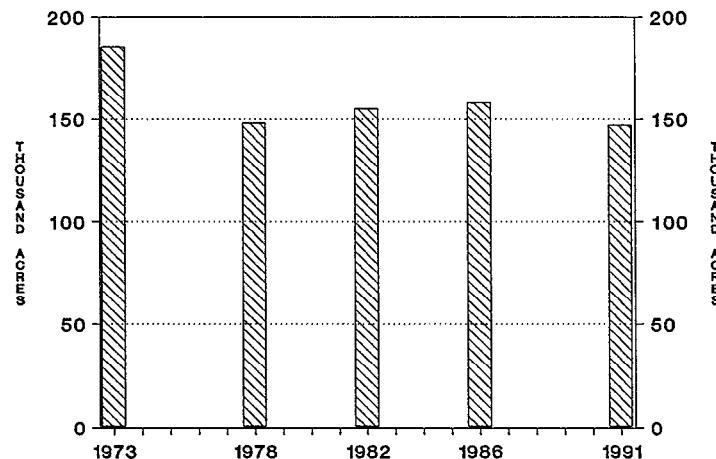
- All years across the top of tables refer to date of planting.

- Rounding rules result in some columns and rows not summing exactly. See page 82 for rounding rules.

**Table 1. OPERATIONS AND ACRES BY COUNTY AND DISTRICT**

COUNTY AND DISTRICT	Operations Number	Apples	Tart Cherries	Sweet Cherries	Blueberries	Grapes
Antrim .....	49	550	2,380	910	18	0
Benzie .....	44	1,160	1,260	360	3	14
Grand Traverse ....	133	1,150	4,650	2,060	7	82
Leelanau .....	185	2,120	7,730	3,800	0	82
Manistee .....	55	2,050	1,580	300	8	0
Charlevoix and Emmet .....	10	190	230	35	0	0
<b>NORTHWEST</b>	<b>476</b>	<b>7,220</b>	<b>17,800</b>	<b>7,470</b>	<b>35</b>	<b>180</b>
Ionia .....	39	1,990	15	8	4	6
Kent .....	158	11,800	620	47	14	11
Mason .....	37	1,490	1,960	500	32	0
Montcalm and Mecosta .....	18	960	39	24	21	1
Muskegon .....	51	2,250	620	5	1,140	0
Newaygo .....	28	1,910	430	11	100	0
Oceana .....	135	3,260	8,010	560	74	21
Ottawa .....	192	3,820	220	49	5,130	1
<b>WEST CENTRAL</b>	<b>658</b>	<b>27,400</b>	<b>11,900</b>	<b>1,200</b>	<b>6,520</b>	<b>40</b>
Allegan .....	150	1,710	480	40	2,340	63
Berrien .....	565	8,000	3,920	180	1,050	6,100
Cass .....	32	1,040	430	8	17	620
Kalamazoo .....	38	640	170	5	28	420
Van Buren .....	440	6,370	3,270	75	5,900	4,500
<b>SOUTHWEST</b>	<b>1,225</b>	<b>17,800</b>	<b>8,270</b>	<b>310</b>	<b>9,340</b>	<b>11,700</b>
North .....	24	130	6	15	31	0
Saginaw Bay .....	33	190	23	1	120	11
Central .....	52	890	4	5	50	7
West Thumb .....	49	960	91	10	94	32
East Thumb .....	61	1,760	27	30	110	18
South Central .....	38	700	8	3	30	36
Southeast .....	64	950	23	9	32	1
<b>EAST</b>	<b>321</b>	<b>5,580</b>	<b>180</b>	<b>73</b>	<b>460</b>	<b>100</b>
<b>STATE</b>	<b>2,680</b>	<b>58,000</b>	<b>38,200</b>	<b>9,050</b>	<b>16,400</b>	<b>12,000</b>

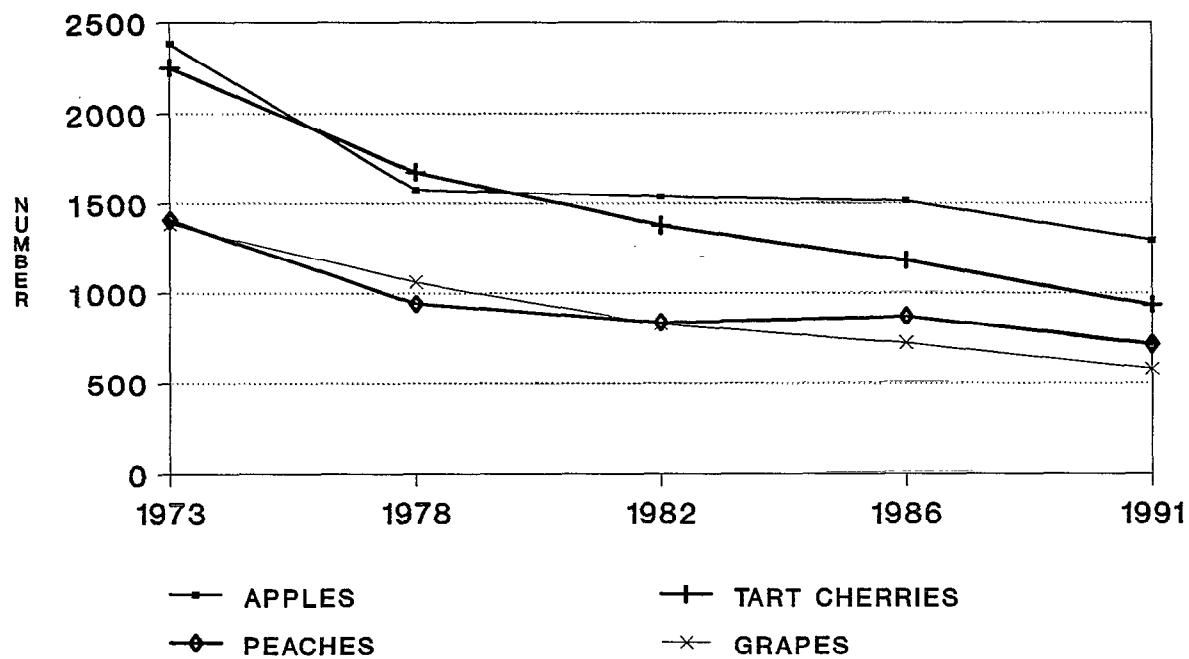
**TOTAL ACRES OF FRUIT  
IN MICHIGAN**



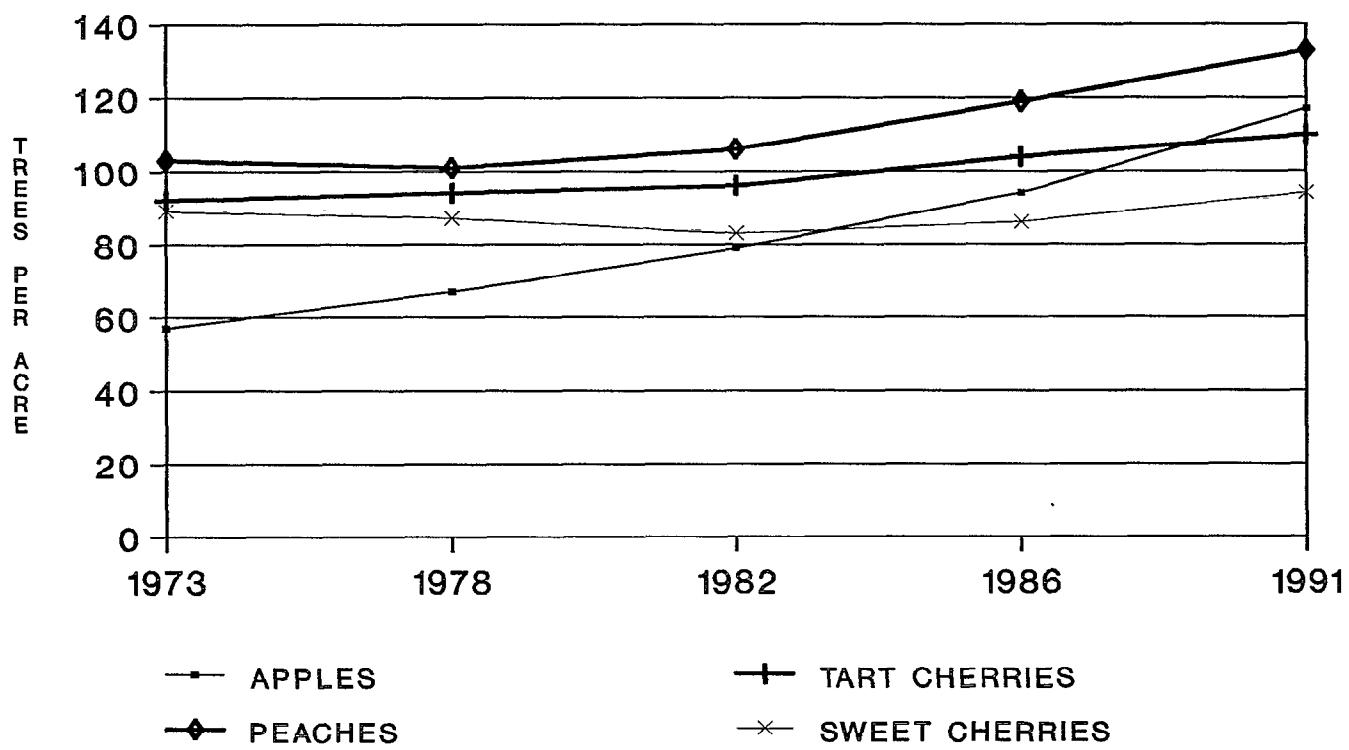
**Table 1. OPERATIONS AND ACRES BY COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	Peaches	Prunes and Plums	Pears	Nectarines	Apricots	Brambles	All Fruit
Acres							
Antrim .....	58	31	34	3	7	7	4,000
Benzie .....	19	32	16	0	30	4	2,900
Grand Traverse .....	38	250	84	4	1	3	8,330
Leelanau .....	83	330	38	2	49	5	14,200
Manistee .....	190	72	14	0	8	9	4,230
Charlevoix and Emmet .....	17	2	8	0	1	4	490
<b>NORTHWEST</b>	<b>400</b>	<b>720</b>	<b>190</b>	<b>9</b>	<b>96</b>	<b>32</b>	<b>34,200</b>
Ionia .....	65	3	5	3	0	8	2,110
Kent .....	400	140	36	23	5	5	13,100
Mason .....	300	210	64	6	0	1	4,560
Montcalm and Mecosta .....	29	20	8	1	1	12	1,120
Muskegon .....	250	8	5	1	1	1	4,280
Newaygo .....	280	43	38	9	5	2	2,830
Oceana .....	1,150	450	210	2	16	0	13,800
Ottawa .....	160	71	9	7	3	5	9,480
<b>WEST CENTRAL</b>	<b>2,630</b>	<b>940</b>	<b>370</b>	<b>52</b>	<b>31</b>	<b>34</b>	<b>51,300</b>
Allegan .....	580	110	230	14	4	12	5,580
Berrien .....	3,350	310	180	140	31	97	23,400
Cass .....	75	65	1	1	0	2	2,260
Kalamazoo .....	20	10	6	1	1	0	1,300
Van Buren .....	920	400	180	40	11	52	21,700
<b>SOUTHWEST</b>	<b>4,950</b>	<b>900</b>	<b>600</b>	<b>200</b>	<b>47</b>	<b>160</b>	<b>54,200</b>
North .....	3	1	3	0	1	18	210
Saginaw Bay .....	14	2	19	0	1	15	400
Central .....	17	6	10	1	1	31	1,020
West Thumb .....	37	12	18	0	0	77	1,330
East Thumb .....	150	11	58	1	1	39	2,200
South Central .....	16	5	11	0	0	56	860
Southeast .....	63	12	16	2	1	72	1,180
<b>EAST</b>	<b>300</b>	<b>49</b>	<b>140</b>	<b>4</b>	<b>5</b>	<b>310</b>	<b>7,200</b>
<b>STATE</b>	<b>8,290</b>	<b>2,600</b>	<b>1,300</b>	<b>260</b>	<b>180</b>	<b>540</b>	<b>147,000</b>

**COMMERCIAL OPERATIONS  
GROWING FRUITS IN MICHIGAN**  
(Number)



**DENSITIES OF VARIOUS  
MICHIGAN FRUITS**  
(Trees per acre)



# APPLES

The number of commercial apple operations declined 14 percent since 1986 to 1,300. There was a simultaneous 6 percent fall in total acres to 58,000. The increase in planting densities, however, increased the total tree count by 17 percent to 6.8 million.

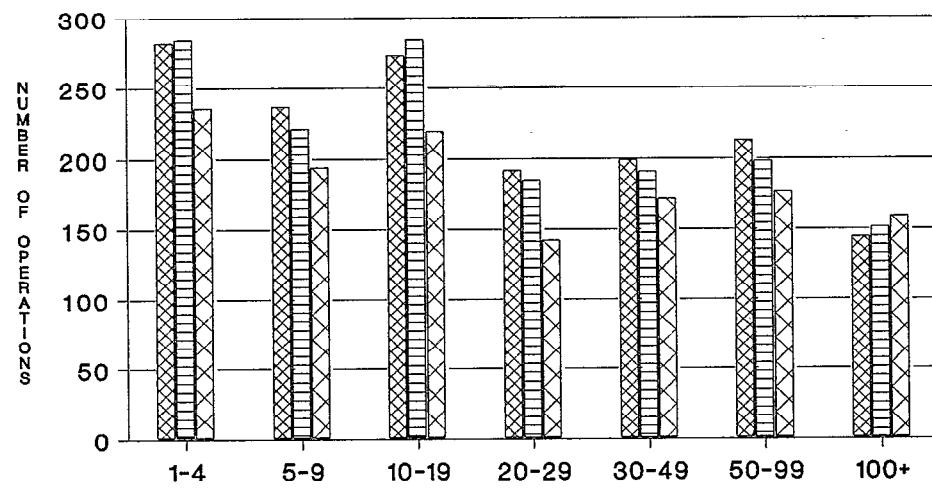
This was the first fruit survey in Michigan on which rootstock data were collected. Rootstocks were obtained for about 88 percent of the 58,000 acres of apples. The plant densities among rootstocks ranged from 54 trees per acre for seedling to 277 trees per acre for Mark.

The five most common varieties were, in order, Red Delicious, Jonathan, Golden Delicious, Rome, and Idared. These accounted for 65 percent of the 6.8 million apple trees. Romes and Jonathans were, for the first time, split between sport and regular strains. The counts for the sports should be viewed as minimums. The most common varieties grouped into 'other' were: Jersey Mac (180 acres), Jonamac (140 acres), Granny Smith (120 acres), Fuji (70 acres), and Ozark Gold (50 acres).

**Table 2. APPLE OPERATIONS AND ACRES BY SIZE GROUPS**

OPERATIONS AND ACRES	Acreage Size Groups								TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	200+	
1991 Operations ....	236	194	220	142	172	177	109	50	1,300
Acres .....	510	1,220	2,990	3,310	6,370	12,300	14,500	16,800	58,000
1986 Operations ....	284	222	284	185	191	198	99	52	1,515
Acres .....	630	1,460	3,720	4,350	7,310	14,060	13,040	17,130	61,700
1982 Operations ....	282	237	273	192	199	213	104	40	1,540
Acres .....	696	1,541	3,598	4,483	7,449	14,791	13,963	12,822	59,343

## MICHIGAN APPLES OPERATIONS BY ACREAGE SIZE GROUP



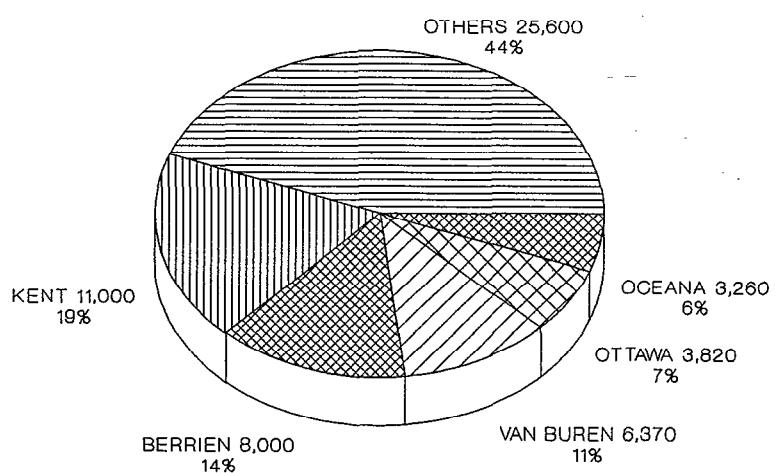
XXXX 1982    = 1986    X 1991

**Table 3.****APPLE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Benzie .....	27	36	32	12	11	29	40	34
Grand Traverse .....	26	11	39	31	21	55	52	46
Leelanau .....	83	96	83	34	79	13	72	140
Manistee .....	24	71	28	11	7	26	46	55
Others .....	11	10	35	29	20	13	74	27
<b>NORTHWEST</b> .....	<b>170</b>	<b>220</b>	<b>220</b>	<b>120</b>	<b>140</b>	<b>140</b>	<b>280</b>	<b>300</b>
Ionia .....	41	26	47	51	25	23	59	44
Kent .....	260	460	420	380	440	400	290	510
Mason .....	73	55	60	32	53	10	9	38
Montcalm .....	27	8	30	19	140	61	7	5
Muskegon .....	64	84	3	80	26	71	83	110
Newaygo .....	51	41	97	75	9	59	41	29
Oceana .....	150	110	92	110	110	140	150	83
Ottawa .....	79	110	100	87	120	70	170	150
<b>WEST CENTRAL</b> .....	<b>740</b>	<b>890</b>	<b>850</b>	<b>830</b>	<b>920</b>	<b>830</b>	<b>810</b>	<b>970</b>

**Table 4.****APPLE TREES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Benzie .....	4,900	5,800	7,400	2,100	3,000	5,700	7,200	5,800
Grand Traverse .....	7,200	1,100	6,900	4,100	3,700	6,800	8,800	8,200
Leelanau .....	19,100	24,100	15,400	4,800	13,200	2,200	14,500	19,100
Manistee .....	4,200	11,100	4,600	2,000	1,100	3,900	5,500	9,900
Others .....	2,400	1,200	5,000	4,700	2,400	1,500	9,400	4,200
<b>NORTHWEST</b> .....	<b>37,800</b>	<b>43,300</b>	<b>39,300</b>	<b>17,700</b>	<b>23,400</b>	<b>20,100</b>	<b>45,400</b>	<b>47,200</b>
Ionia .....	9,400	8,600	7,100	8,900	3,500	2,900	8,200	4,400
Kent .....	74,800	125,000	91,900	83,700	77,000	68,800	42,800	81,000
Mason .....	11,700	8,800	10,200	5,100	7,200	1,900	1,500	6,100
Montcalm .....	8,100	1,100	7,700	2,500	20,800	9,000	700	900
Muskegon .....	11,300	12,800	900	16,000	2,900	9,500	13,400	16,000
Newaygo .....	9,500	6,800	15,200	11,100	1,300	9,300	6,300	4,300
Oceana .....	24,600	18,500	12,900	16,000	14,700	21,400	20,100	11,700
Ottawa .....	26,000	24,200	23,500	19,900	25,100	9,500	27,700	29,600
<b>WEST CENTRAL</b> .....	<b>175,000</b>	<b>206,000</b>	<b>169,000</b>	<b>163,000</b>	<b>152,000</b>	<b>132,000</b>	<b>121,000</b>	<b>154,000</b>

**TOP APPLE COUNTIES  
ACRES AND PERCENT**

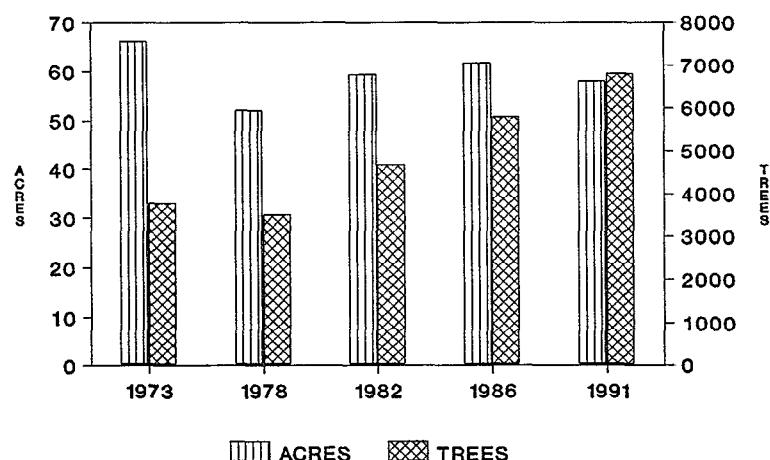
**Table 3. APPLE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Benzie .....	14	55	140	110	95	530	1,160
Grand Traverse .....	30	29	190	120	96	400	1,150
Leelanau .....	240	210	250	86	290	440	2,120
Manistee .....	29	61	310	84	180	1,120	2,050
Others .....	35	23	84	81	51	250	740
<b>NORTHWEST</b>	<b>350</b>	<b>380</b>	<b>970</b>	<b>480</b>	<b>710</b>	<b>2,740</b>	<b>7,220</b>
Ionia .....	32	130	290	150	240	830	1,990
Kent .....	590	500	1,760	1,300	1,180	3,280	11,800
Mason .....	38	33	280	100	160	550	1,490
Montcalm .....	14	24	170	170	91	200	960
Muskegon .....	83	78	290	200	220	860	2,250
Newaygo .....	100	120	360	150	140	630	1,910
Oceana .....	90	93	480	240	390	1,020	3,260
Ottawa .....	210	160	550	350	430	1,230	3,820
<b>WEST CENTRAL</b>	<b>1,160</b>	<b>1,140</b>	<b>4,180</b>	<b>2,660</b>	<b>2,850</b>	<b>8,600</b>	<b>27,400</b>

**Table 4. APPLE TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Benzie .....	2,500	10,000	25,500	16,900	12,200	26,400	135,000
Grand Traverse .....	4,900	3,300	28,400	16,900	10,200	30,800	141,000
Leelanau .....	41,400	32,900	32,500	11,300	35,300	42,400	308,000
Manistee .....	4,100	7,600	43,900	10,000	17,800	53,000	179,000
Others .....	5,200	2,200	10,300	8,200	5,400	11,900	74,000
<b>NORTHWEST</b>	<b>58,100</b>	<b>56,000</b>	<b>141,000</b>	<b>63,300</b>	<b>80,900</b>	<b>165,000</b>	<b>838,000</b>
Ionia .....	3,800	16,100	38,500	24,400	24,300	40,700	201,000
Kent .....	82,000	72,100	259,000	202,000	120,000	183,000	1,560,000
Mason .....	5,800	4,900	38,200	14,900	18,500	29,900	165,000
Montcalm .....	1,500	2,300	20,600	22,600	14,600	12,200	125,000
Muskegon .....	9,400	8,000	40,200	24,200	21,600	49,200	235,000
Newaygo .....	14,600	18,400	46,500	16,500	15,100	39,900	215,000
Oceana .....	15,000	12,500	64,000	27,400	42,400	66,300	368,000
Ottawa .....	32,500	26,200	73,500	59,400	39,000	61,900	478,000
<b>WEST CENTRAL</b>	<b>165,000</b>	<b>160,000</b>	<b>580,000</b>	<b>391,000</b>	<b>295,000</b>	<b>483,000</b>	<b>3,350,000</b>

**MICHIGAN APPLES  
ACRES AND TREES  
(Thousands)**

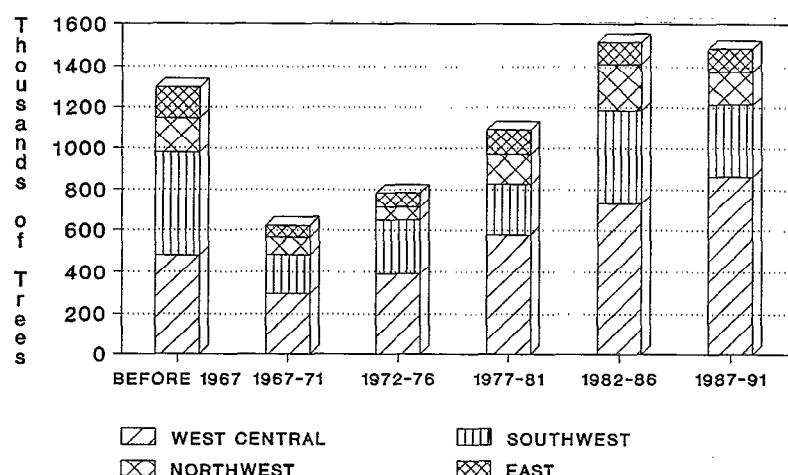


**Table 3.****APPLE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Allegan .....	33	9	48	46	88	49	45	47
Berrien .....	140	120	200	120	240	160	230	200
Van Buren .....	120	120	110	130	170	78	96	300
Others .....	44	34	56	59	53	80	40	120
SOUTHWEST .....	340	280	410	360	550	370	410	670
North .....	9	3	1	1	6	7	15	5
Saginaw Bay .....	0	2	4	5	0	2	2	2
Central .....	9	3	26	2	14	23	9	18
West Thumb .....	11	31	22	3	17	45	25	60
East Thumb .....	15	6	6	9	36	37	7	9
South Central .....	17	12	14	4	12	10	44	0
Southeast .....	65	49	44	20	60	18	52	44
EAST .....	130	110	120	43	150	140	150	140
STATE .....	1,380	1,500	1,600	1,350	1,760	1,480	1,650	2,090

**Table 4.****APPLE TREES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Allegan .....	8,000	1,500	6,800	7,500	13,900	7,700	8,600	7,700
Berrien .....	27,500	31,100	36,300	19,200	34,800	27,700	30,400	30,700
Van Buren .....	35,500	25,600	19,800	18,600	24,100	10,300	14,800	58,200
Others .....	8,400	5,000	7,500	9,600	7,600	12,200	5,500	20,600
SOUTHWEST .....	79,400	63,200	70,400	54,900	80,400	57,900	59,300	117,000
North .....	2,300	500	100	200	900	1,100	3,200	400
Saginaw Bay .....	0	100	600	700	0	200	200	200
Central .....	1,900	600	4,900	300	2,500	4,400	2,200	3,000
West Thumb .....	3,600	9,400	4,100	500	2,400	7,700	2,900	7,200
East Thumb .....	2,500	1,300	1,300	1,900	5,000	5,100	1,200	1,800
South Central .....	2,000	1,600	2,700	600	2,200	1,300	5,500	0
Southeast .....	15,800	12,400	12,700	3,700	10,100	2,500	9,100	7,200
EAST .....	28,100	25,900	26,400	7,900	23,100	22,300	24,300	19,800
STATE .....	320,000	339,000	305,000	244,000	279,000	232,000	250,000	338,000

**APPLE TREES BY YEARS OF PLANTING AND AREA**

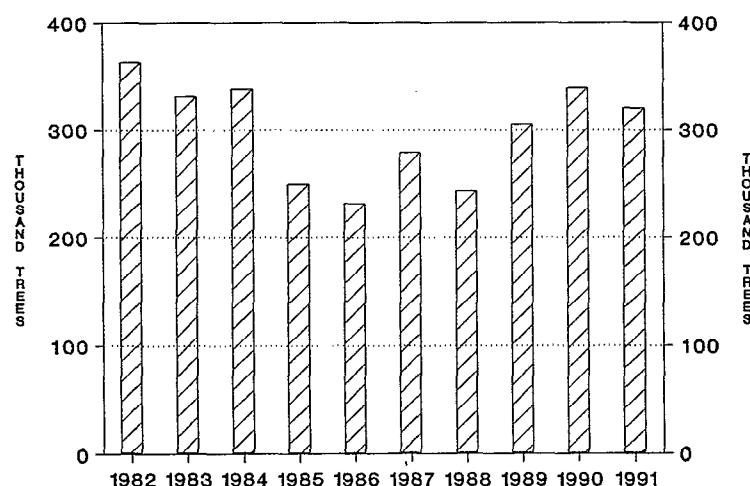
**Table 3. APPLE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Allegan .....	44	26	150	130	210	780	1,710
Berrien .....	260	250	780	980	670	3,650	8,000
Van Buren .....	190	260	700	800	590	2,710	6,370
Others .....	97	92	140	150	120	590	1,680
<b>SOUTHWEST</b>	<b>590</b>	<b>630</b>	<b>1,770</b>	<b>2,060</b>	<b>1,590</b>	<b>7,730</b>	<b>17,800</b>
North .....	1	0	49	0	1	30	130
Saginaw Bay .....	4	3	20	17	36	95	190
Central .....	15	21	240	110	62	340	890
West Thumb .....	25	22	150	55	140	360	960
East Thumb .....	41	18	100	230	180	1,070	1,760
South Central .....	27	24	19	61	10	450	700
Southeast .....	35	26	170	56	62	250	950
<b>EAST</b>	<b>150</b>	<b>110</b>	<b>750</b>	<b>530</b>	<b>490</b>	<b>2,600</b>	<b>5,580</b>
<b>STATE</b> .....	<b>2,240</b>	<b>2,260</b>	<b>7,670</b>	<b>5,720</b>	<b>5,640</b>	<b>21,700</b>	<b>58,000</b>

**Table 4. APPLE TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Allegan .....	8,900	3,800	21,600	14,600	22,200	41,600	174,000
Berrien .....	31,800	32,600	101,000	120,000	72,900	222,000	818,000
Van Buren .....	32,300	82,400	106,000	108,000	81,500	195,000	812,000
Others .....	14,600	11,900	20,200	16,600	14,200	38,600	192,000
<b>SOUTHWEST</b>	<b>87,600</b>	<b>131,000</b>	<b>249,000</b>	<b>259,000</b>	<b>191,000</b>	<b>497,000</b>	<b>2,000,000</b>
North .....	300	0	6,400	0	100	1,000	16,500
Saginaw Bay .....	400	400	3,300	1,900	3,500	4,800	16,300
Central .....	2,700	4,100	34,900	20,100	6,700	16,000	104,000
West Thumb .....	3,300	3,200	29,000	7,500	15,400	13,700	110,000
East Thumb .....	4,800	2,800	14,800	25,800	19,700	69,300	157,000
South Central .....	3,600	2,700	2,200	6,800	1,500	32,500	65,200
Southeast .....	5,200	4,800	31,400	8,900	8,000	14,800	147,000
<b>EAST</b>	<b>20,300</b>	<b>18,000</b>	<b>122,000</b>	<b>71,000</b>	<b>54,900</b>	<b>152,000</b>	<b>616,000</b>
<b>STATE</b> .....	<b>331,000</b>	<b>364,000</b>	<b>1,090,000</b>	<b>784,000</b>	<b>621,000</b>	<b>1,300,000</b>	<b>6,800,000</b>

### APPLE TREES BY YEAR OF PLANTING



**Table 5.****APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	6	1	2	1	1	3	0	1
Golden Delicious .....	13	21	29	15	10	11	19	80
Regular Delicious .....	0	0	1	0	5	0	0	8
Sport Red Delicious .....	10	12	13	11	34	14	65	13
Empire .....	14	24	17	15	12	25	28	36
Gala .....	14	11	18	3	9	0	1	0
Idared .....	20	9	18	6	10	32	34	77
Jonagold .....	8	11	2	0	2	0	0	0
Jonathan .....	1	15	3	2	0	0	2	7
Sport Jonathan .....	2	0	5	0	0	0	1	0
McIntosh .....	26	31	43	21	21	12	36	9
Mutsu .....	4	2	12	3	2	8	8	5
Northern Spy .....	27	35	31	29	20	19	57	39
Paulared .....	1	1	2	0	0	0	2	0
RI Greening .....	1	0	0	0	0	0	7	5
Rome .....	4	0	4	5	0	3	10	9
Sport Rome .....	0	32	9	4	6	1	11	9
Spartan .....	9	15	0	0	0	0	0	0
Winesap .....	0	0	0	0	0	0	0	0
Other .....	14	2	9	1	7	0	2	1
Unknown .....	0	4	0	1	0	6	1	1
<b>NORTHWEST .....</b>	<b>170</b>	<b>220</b>	<b>220</b>	<b>120</b>	<b>140</b>	<b>140</b>	<b>280</b>	<b>300</b>

**Table 6.****APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	700	200	300	200	100	400	0	200
Golden Delicious .....	1,600	3,500	5,100	1,900	2,000	1,500	2,900	11,000
Regular Delicious .....	0	0	100	0	600	0	0	1,000
Sport Red Delicious .....	1,900	1,900	2,300	1,900	5,000	2,700	9,800	2,600
Empire .....	2,600	3,700	3,100	2,100	1,500	4,000	4,600	5,800
Gala .....	5,500	2,900	3,500	400	2,100	0	200	0
Idared .....	3,600	1,800	2,600	800	2,200	4,700	6,800	11,300
Jonagold .....	2,700	3,600	400	0	400	0	0	0
Jonathan .....	300	1,800	500	300	0	0	500	1,400
Sport Jonathan .....	800	0	900	0	0	0	100	0
McIntosh .....	5,200	3,400	9,000	3,300	2,900	2,200	5,700	1,800
Mutsu .....	800	500	2,500	400	300	1,000	1,300	600
Northern Spy .....	5,600	8,200	5,500	4,800	3,800	2,200	6,900	7,100
Paulared .....	200	100	300	0	0	0	400	0
RI Greening .....	100	0	0	0	0	0	1,300	700
Rome .....	700	0	600	700	0	400	1,400	1,300
Sport Rome .....	0	7,900	1,300	500	1,400	200	2,700	2,000
Spartan .....	1,400	3,000	0	0	0	0	0	0
Winesap .....	0	0	0	0	0	0	0	0
Other .....	4,100	300	1,300	200	1,100	0	500	200
Unknown .....	0	500	0	200	0	800	300	200
<b>NORTHWEST .....</b>	<b>37,800</b>	<b>43,300</b>	<b>39,300</b>	<b>17,700</b>	<b>23,400</b>	<b>20,100</b>	<b>45,400</b>	<b>47,200</b>

**Table 5. APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	2	3	6	14	19	31	88
Golden Delicious .....	11	46	85	68	130	150	690
Regular Delicious .....	26	12	20	21	55	410	560
Sport Red Delicious ..	5	40	110	6	37	76	440
Empire .....	32	10	27	1	0	0	240
Gala .....	0	0	0	0	0	0	56
Idared .....	60	68	400	110	97	68	1,010
Jonagold .....	0	0	0	1	0	0	24
Jonathan .....	1	15	20	7	25	390	490
Sport Jonathan .....	0	0	0	0	2	0	11
McIntosh .....	48	92	76	32	67	490	1,000
Mutsu .....	7	0	22	14	20	2	110
Northern Spy .....	100	23	130	130	170	680	1,490
Paulared .....	2	0	6	10	7	0	31
RI Greening .....	0	7	23	20	44	190	300
Rome .....	47	22	15	25	9	7	160
Sport Rome .....	0	0	11	3	0	0	86
Spartan .....	2	0	8	6	2	7	50
Winesap .....	0	0	0	0	0	1	1
Other .....	4	42	11	6	19	82	200
Unknown .....	2	2	4	0	4	160	180
<b>NORTHWEST</b>	<b>350</b>	<b>380</b>	<b>970</b>	<b>480</b>	<b>710</b>	<b>2,740</b>	<b>7,220</b>

**Table 6. APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	200	400	900	1,300	1,500	2,000	8,400
Golden Delicious .....	1,500	6,700	12,800	9,300	15,800	18,900	94,500
Regular Delicious .....	4,100	1,200	2,400	2,800	5,900	20,800	38,900
Sport Red Delicious ..	700	5,600	14,700	1,600	3,900	6,700	61,300
Empire .....	4,800	1,400	4,400	200	0	0	38,200
Gala .....	0	0	0	0	0	0	14,600
Idared .....	7,200	10,300	60,000	14,100	10,600	5,500	142,000
Jonagold .....	0	0	0	200	0	0	7,300
Jonathan .....	200	2,500	2,800	900	2,200	19,400	32,800
Sport Jonathan .....	0	0	0	0	200	0	2,000
McIntosh .....	10,800	12,400	11,900	5,200	6,900	24,300	105,000
Mutsu .....	800	0	3,400	1,600	2,300	200	15,700
Northern Spy .....	17,600	2,800	16,500	18,600	21,600	34,500	156,000
Paulared .....	300	0	1,200	1,200	1,000	0	4,700
RI Greening .....	0	1,200	3,000	2,200	5,300	18,000	31,800
Rome .....	8,800	3,400	2,400	2,100	800	500	23,100
Sport Rome .....	0	0	1,600	600	0	0	18,200
Spartan .....	300	0	900	700	300	500	7,100
Winesap .....	0	0	0	0	0	100	100
Other .....	500	7,300	1,300	700	2,000	6,400	25,900
Unknown .....	300	300	600	0	600	6,800	10,600
<b>NORTHWEST</b>	<b>58,100</b>	<b>56,000</b>	<b>141,000</b>	<b>63,300</b>	<b>80,900</b>	<b>165,000</b>	<b>838,000</b>

**Table 5.****APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	7	8	15	4	6	2	3	1
Golden Delicious ....	73	59	110	100	52	110	20	31
Regular Delicious ....	9	0	5	22	41	16	89	28
Sport Red Delicious ..	64	160	180	240	290	230	150	300
Empire .....	82	83	72	55	61	76	170	190
Gala .....	55	110	72	61	88	23	3	1
Idared .....	15	8	44	24	33	50	83	76
Jonagold .....	84	42	4	5	12	4	0	0
Jonathan .....	28	53	42	33	40	12	61	40
Sport Jonathan .....	60	65	65	35	58	35	8	4
McIntosh .....	16	69	100	52	62	34	36	42
Mutsu .....	24	29	9	10	24	26	6	8
Northern Spy .....	46	41	40	42	52	76	34	47
Paulared .....	5	2	3	0	23	12	6	10
RI Greening .....	3	0	0	0	1	0	0	0
Rome .....	49	47	36	8	37	74	68	110
Sport Rome .....	34	37	18	23	27	20	50	12
Spartan .....	17	10	7	16	3	12	6	38
Winesap .....	0	0	0	9	0	7	2	4
Other .....	63	35	3	66	9	12	16	13
Unknown .....	13	33	30	22	0	4	1	17
WEST CENTRAL	740	890	850	830	920	830	810	970

**Table 6.****APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	1,600	1,200	2,300	700	1,100	300	600	300
Golden Delicious ....	16,100	14,700	20,900	16,700	9,200	15,800	2,900	3,900
Regular Delicious ....	1,300	0	600	3,300	4,800	1,700	10,500	4,200
Sport Red Delicious ..	17,000	33,200	35,100	48,700	48,000	41,200	25,700	53,000
Empire .....	19,200	21,900	15,000	11,400	10,100	11,600	23,200	28,800
Gala .....	16,300	41,900	19,900	18,700	20,100	3,800	300	100
Idared .....	2,300	1,300	8,300	4,000	5,000	7,000	12,100	11,500
Jonagold .....	25,100	9,300	800	700	2,500	500	0	0
Jonathan .....	4,400	9,900	7,900	6,200	5,800	1,100	12,900	7,300
Sport Jonathan .....	13,500	11,500	13,500	7,100	9,100	5,000	900	400
McIntosh .....	5,200	11,200	18,900	9,700	10,700	6,100	6,100	6,000
Mutsu .....	4,100	4,500	1,400	1,300	3,600	4,300	1,400	1,400
Northern Spy .....	7,300	6,700	7,200	7,900	7,200	8,800	4,000	5,000
Paulared .....	1,700	700	1,100	0	3,000	2,100	800	1,200
RI Greening .....	400	0	0	0	100	0	0	0
Rome .....	7,700	7,400	5,400	1,300	5,300	13,900	9,200	18,600
Sport Rome .....	8,400	8,800	3,600	3,700	4,900	3,600	7,100	1,400
Spartan .....	4,300	4,500	1,800	1,900	400	1,500	900	5,500
Winesap .....	0	0	0	1,300	0	400	200	400
Other .....	17,300	13,300	400	15,200	1,500	2,500	1,700	1,800
Unknown .....	1,900	4,200	4,700	3,500	0	700	100	3,200
WEST CENTRAL	175,000	206,000	169,000	163,000	152,000	132,000	121,000	154,000

**Table 5. APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	5	0	10	17	4	94	180
Golden Delicious .....	92	42	220	130	270	620	1,930
Regular Delicious .....	54	36	150	150	350	1,730	2,680
Sport Red Delicious .....	230	330	970	530	300	510	4,480
Empire .....	220	200	430	100	20	30	1,790
Gala .....	5	0	4	0	12	0	430
Idared .....	120	110	810	600	320	500	2,790
Jonagold .....	0	6	0	0	0	0	160
Jonathan .....	23	19	56	76	210	1,960	2,650
Sport Jonathan .....	22	7	12	6	31	21	430
McIntosh .....	95	150	440	240	210	980	2,530
Mutsu .....	8	0	26	57	25	48	300
Northern Spy .....	44	12	80	79	170	810	1,570
Paulared .....	6	44	160	190	260	62	780
Rt Greening .....	0	0	19	17	110	110	260
Rome .....	140	90	500	330	310	640	2,440
Sport Rome .....	29	33	140	56	19	10	510
Spartan .....	41	20	62	8	11	1	250
Winesap .....	1	2	18	19	99	200	360
Other .....	23	20	43	35	31	46	420
Unknown .....	8	13	25	23	91	230	510
WEST CENTRAL	1,160	1,140	4,180	2,660	2,850	8,600	27,400

**Table 6. APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	900	0	1,500	1,800	500	4,100	16,900
Golden Delicious .....	11,600	5,200	30,400	17,100	25,800	42,300	233,000
Regular Delicious .....	6,700	4,100	17,400	17,600	37,600	101,000	211,000
Sport Red Delicious .....	39,000	52,600	154,000	84,800	33,400	36,600	702,000
Empire .....	30,800	27,200	60,200	14,400	2,400	2,400	279,000
Gala .....	800	0	500	0	1,100	0	124,000
Idared .....	15,400	13,300	102,000	91,000	33,400	35,400	342,000
Jonagold .....	0	700	0	400	0	0	40,000
Jonathan .....	3,000	2,300	7,700	11,900	19,600	100,000	200,000
Sport Jonathan .....	2,500	900	1,400	600	3,600	1,300	71,300
McIntosh .....	12,600	21,200	58,500	33,700	22,600	46,900	269,000
Mutsu .....	1,000	100	4,000	6,400	2,800	4,000	40,300
Northern Spy .....	6,300	2,300	10,000	9,500	18,400	29,900	130,000
Paulared .....	700	5,300	19,200	30,300	29,000	6,100	101,000
Rt Greening .....	0	0	1,900	800	11,800	6,300	21,300
Rome .....	19,300	13,300	66,000	51,000	27,100	34,800	280,000
Sport Rome .....	4,300	4,400	23,500	9,100	1,900	600	85,300
Spartan .....	4,900	2,300	10,200	900	1,400	100	40,600
Winesap .....	200	200	1,800	1,700	9,700	10,200	26,100
Other .....	3,700	2,900	6,100	5,100	4,000	2,200	77,700
Unknown .....	1,000	2,100	3,500	3,100	8,500	18,900	55,400
WEST CENTRAL	165,000	160,000	580,000	391,000	295,000	483,000	3,350,000

**Table 5.****APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	1	4	2	2	2	2	3	4
Golden Delicious ....	52	53	83	78	69	40	32	85
Regular Delicious ....	0	1	1	6	6	7	10	42
Sport Red Delicious ..	33	15	110	140	180	110	100	240
Empire .....	28	33	27	5	45	20	47	54
Gala .....	57	35	6	14	10	3	1	0
Idared .....	5	5	2	7	9	11	14	8
Jonagold .....	20	5	5	5	2	2	0	1
Jonathan .....	22	40	61	12	23	29	36	40
Sport Jonathan .....	29	23	22	30	58	8	9	63
McIntosh .....	11	11	21	7	34	14	11	30
Mutsu .....	7	4	4	5	12	22	33	7
Northern Spy .....	6	1	1	17	18	21	28	11
Paulared .....	0	0	5	0	3	1	5	7
Ri Greening .....	0	0	0	0	0	0	0	0
Rome .....	20	6	13	4	18	15	52	34
Sport Rome .....	14	20	32	9	23	41	3	14
Spartan .....	1	1	0	0	0	6	5	6
Winesap .....	1	5	3	4	10	5	5	5
Other .....	35	10	13	20	25	13	15	11
Unknown .....	0	7	0	0	0	2	2	12
<b>SOUTHWEST</b>	<b>340</b>	<b>280</b>	<b>410</b>	<b>360</b>	<b>550</b>	<b>370</b>	<b>410</b>	<b>670</b>

**Table 6.****APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	200	600	300	200	300	300	400	500
Golden Delicious ....	9,300	12,100	14,100	12,000	10,800	7,000	5,300	13,200
Regular Delicious ....	0	100	100	800	900	1,000	1,400	6,500
Sport Red Delicious ..	9,800	3,900	21,800	21,400	25,800	19,100	16,200	42,400
Empire .....	6,100	4,800	4,100	900	7,100	3,300	6,900	11,000
Gala .....	17,100	11,600	1,400	2,200	4,100	700	100	100
Idared .....	800	900	200	1,000	1,500	1,300	1,600	1,200
Jonagold .....	7,100	2,200	800	1,300	400	400	0	200
Jonathan .....	3,800	7,700	9,100	1,700	3,300	4,300	4,800	5,000
Sport Jonathan .....	5,300	3,100	3,600	4,800	7,300	900	1,500	12,100
McIntosh .....	2,100	3,200	2,700	1,300	5,100	2,000	2,100	5,000
Mutsu .....	1,500	1,600	500	900	1,200	3,500	3,500	1,200
Northern Spy .....	1,200	600	100	1,600	2,600	3,100	3,300	1,300
Paulared .....	0	0	700	0	300	200	600	700
Ri Greening .....	0	0	0	0	0	0	0	0
Rome .....	4,000	700	2,900	400	1,400	2,500	6,400	4,200
Sport Rome .....	2,400	3,100	5,300	1,500	3,400	4,700	1,100	3,800
Spartan .....	200	800	0	0	0	1,100	600	900
Winesap .....	100	700	400	500	1,300	600	700	700
Other .....	8,400	2,800	2,300	2,400	3,600	1,600	2,500	1,400
Unknown .....	0	2,700	0	0	0	300	300	5,800
<b>SOUTHWEST</b>	<b>79,400</b>	<b>63,200</b>	<b>70,400</b>	<b>54,900</b>	<b>80,400</b>	<b>57,900</b>	<b>59,300</b>	<b>117,000</b>

**Table 5. APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	9	0	8	2	3	45	87
Golden Delicious .....	43	77	220	350	380	950	2,510
Regular Delicious .....	22	16	31	73	110	1,030	1,350
Sport Red Delicious ..	250	280	550	480	240	770	3,500
Empire .....	68	45	49	17	8	6	450
Gala .....	0	1	3	1	3	0	130
Idared .....	10	25	190	150	58	120	610
Jonagold .....	0	4	0	0	0	0	43
Jonathan .....	40	36	150	200	200	2,870	3,760
Sport Jonathan .....	51	39	43	51	85	83	600
McIntosh .....	12	16	79	130	73	320	770
Mutsu .....	9	2	7	29	10	28	180
Northern Spy .....	10	7	25	7	37	150	340
Paulared .....	8	18	64	180	88	72	450
RI Greening .....	0	0	1	6	28	120	160
Rome .....	24	13	160	210	140	470	1,180
Sport Rome .....	13	18	96	51	22	56	410
Spartan .....	0	2	7	9	5	10	52
Winesap .....	0	6	16	57	60	390	570
Other .....	13	25	53	44	15	120	410
Unknown .....	3	4	22	14	21	120	210
<b>SOUTHWEST</b>	<b>590</b>	<b>630</b>	<b>1,770</b>	<b>2,060</b>	<b>1,590</b>	<b>7,730</b>	<b>17,800</b>

**Table 6. APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	1,200	100	1,200	300	300	2,800	8,700
Golden Delicious .....	5,900	10,200	29,000	43,800	49,000	76,500	298,000
Regular Delicious .....	2,700	1,600	3,200	7,900	9,400	63,100	98,700
Sport Red Delicious ..	40,700	78,300	86,800	63,100	31,000	71,800	532,000
Empire .....	10,000	10,200	6,700	2,700	3,500	500	77,800
Gala .....	0	100	800	100	400	0	38,700
Idared .....	1,200	2,900	21,900	17,100	6,300	9,500	67,400
Jonagold .....	0	900	0	0	0	0	13,300
Jonathan .....	5,200	4,100	19,100	23,800	20,200	153,000	265,000
Sport Jonathan .....	8,000	6,400	5,600	7,500	8,900	8,100	83,100
McIntosh .....	2,000	1,900	12,400	15,600	9,300	16,800	81,500
Mutsu .....	1,500	300	800	3,800	900	2,700	23,900
Northern Spy .....	1,200	900	2,700	800	4,200	8,900	32,500
Paulared .....	900	2,300	7,900	22,900	12,400	8,300	57,200
RI Greening .....	0	0	100	600	3,700	6,500	10,900
Rome .....	2,900	1,700	19,600	25,800	16,100	29,500	118,000
Sport Rome .....	1,900	4,100	15,500	7,300	2,500	6,300	62,900
Spartan .....	0	300	700	1,400	600	1,000	7,600
Winesap .....	0	600	2,100	6,800	5,800	19,300	39,600
Other .....	1,700	3,100	7,400	6,100	1,700	6,500	51,500
Unknown .....	600	600	5,400	1,800	4,600	6,000	28,100
<b>SOUTHWEST</b>	<b>87,600</b>	<b>131,000</b>	<b>249,000</b>	<b>259,000</b>	<b>191,000</b>	<b>497,000</b>	<b>2,000,000</b>

**Table 5.****APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	2	0	0	0	3	13	3	3
Golden Delicious .....	15	16	10	6	20	20	10	5
Regular Delicious .....	0	0	12	0	14	5	5	1
Sport Red Delicious ..	27	31	28	8	7	10	23	49
Empire .....	7	1	6	3	9	15	25	6
Gala .....	10	1	12	0	8	2	0	0
Idared .....	3	15	2	1	5	12	13	6
Jonagold .....	5	2	5	1	4	2	0	0
Jonathan .....	16	8	4	2	11	6	5	1
Sport Jonathan .....	0	0	2	0	0	2	5	10
McIntosh .....	4	17	5	8	16	11	7	6
Mutsu .....	3	5	3	1	5	3	9	1
Northern Spy .....	2	1	2	0	6	7	5	10
Paulared .....	0	0	16	1	1	3	3	2
RI Greening .....	0	0	1	0	0	3	0	0
Rome .....	2	1	0	1	17	0	8	3
Sport Rome .....	0	0	1	0	0	2	14	0
Spartan .....	1	0	0	0	1	8	6	0
Winesap .....	0	0	0	0	3	4	0	1
Other .....	27	3	8	11	12	9	5	32
Unknown .....	0	3	0	0	2	7	11	4
EAST .....	120	100	120	43	140	140	150	140

**Table 6.****APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	300	0	0	0	400	2,000	700	300
Golden Delicious .....	4,000	5,900	1,600	700	3,200	3,000	1,500	900
Regular Delicious .....	0	0	4,000	0	2,400	900	1,100	500
Sport Red Delicious ..	5,000	7,500	7,300	1,700	900	1,400	2,900	7,000
Empire .....	1,800	200	1,100	700	1,200	2,500	4,400	1,100
Gala .....	1,400	200	2,100	0	1,300	300	0	0
Idared .....	500	3,300	300	100	900	1,600	1,800	800
Jonagold .....	1,900	200	1,300	200	600	500	0	0
Jonathan .....	2,600	2,400	700	300	2,200	800	600	200
Sport Jonathan .....	0	0	400	0	0	300	700	1,100
McIntosh .....	800	4,400	800	1,500	2,400	1,700	1,100	900
Mutsu .....	600	500	600	100	600	400	1,100	200
Northern Spy .....	200	200	300	0	1,000	900	800	1,600
Paulared .....	0	100	4,000	200	100	500	600	400
RI Greening .....	0	0	0	0	100	700	0	0
Rome .....	300	100	0	200	3,200	0	1,000	400
Sport Rome .....	0	0	300	0	0	300	1,500	0
Spartan .....	200	0	0	0	100	1,000	1,300	0
Winesap .....	0	0	0	0	400	600	0	100
Other .....	8,500	500	1,600	2,200	1,900	1,200	900	3,600
Unknown .....	0	400	0	0	200	1,700	2,300	700
EAST .....	28,100	25,900	26,400	7,900	23,100	22,300	24,300	19,800

**Table 5. APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	7	9	12	8	6	59	120
Golden Delicious .....	18	6	70	55	71	300	620
Regular Delicious .....	6	2	35	95	120	620	920
Sport Red Delicious ..	13	25	130	44	43	130	570
Empire .....	22	20	41	16	3	0	170
Gala .....	0	0	1	0	0	0	34
Idared .....	12	9	120	50	27	83	360
Jonagold .....	0	1	1	0	0	0	23
Jonathan .....	4	4	21	35	28	390	530
Sport Jonathan .....	3	0	6	1	7	0	35
McIntosh .....	16	14	120	88	57	460	830
Mutsu .....	13	2	13	6	5	11	79
Northern Spy .....	10	9	19	20	54	330	470
Paulared .....	7	3	40	45	35	7	160
RI Greening .....	0	1	0	1	0	4	9
Rome .....	5	2	38	12	1	44	130
Sport Rome .....	0	0	4	0	0	1	22
Spartan .....	0	1	8	4	3	3	34
Winesap .....	2	2	2	4	1	54	73
Other .....	9	4	55	28	18	34	250
Unknown .....	0	2	19	14	10	66	140
EAST .....	150	110	750	530	490	2,600	5,580

**Table 6. APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	1,200	1,100	1,800	1,200	600	2,200	11,800
Golden Delicious .....	3,200	700	11,300	8,600	6,800	20,900	72,300
Regular Delicious .....	800	300	8,700	9,600	14,300	42,700	85,300
Sport Red Delicious ..	1,600	3,900	18,600	7,500	5,400	9,500	80,200
Empire .....	2,900	4,100	8,100	3,500	200	0	31,800
Gala .....	0	0	200	0	0	0	5,500
Idared .....	1,300	1,500	18,200	7,100	3,000	4,400	44,800
Jonagold .....	0	200	300	100	0	0	5,300
Jonathan .....	500	400	3,100	3,900	3,300	24,800	45,800
Sport Jonathan .....	600	200	1,400	100	600	0	5,400
McIntosh .....	2,000	1,800	19,800	11,200	7,000	23,600	79,000
Mutsu .....	1,500	300	2,000	1,000	400	600	9,900
Northern Spy .....	1,600	800	2,500	2,000	5,600	12,100	29,600
Paulared .....	1,100	500	6,600	5,600	4,200	700	24,600
RI Greening .....	0	400	0	100	0	100	1,400
Rome .....	700	400	5,400	1,400	200	3,500	16,800
Sport Rome .....	0	0	900	0	0	0	3,000
Spartan .....	0	100	1,400	400	200	200	4,900
Winesap .....	300	200	300	400	100	2,700	5,100
Other .....	1,000	700	8,100	3,400	2,000	1,500	37,100
Unknown .....	0	400	3,400	3,900	1,000	2,600	16,600
EAST .....	20,300	18,000	122,000	71,000	54,900	152,000	616,000

**Table 5.****APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	15	12	20	7	12	19	10	10
Golden Delicious .....	150	150	230	200	150	180	81	200
Regular Delicious .....	9	1	18	28	66	28	100	80
Sport Red Delicious ..	130	220	330	400	510	360	340	600
Empire .....	130	140	120	79	130	140	270	280
Gala .....	140	160	110	78	120	29	5	1
Idared .....	43	36	65	38	57	100	140	170
Jonagold .....	120	60	16	10	19	8	0	1
Jonathan .....	67	110	110	49	75	46	100	88
Sport Jonathan .....	91	89	95	65	120	45	23	76
McIntosh .....	57	130	170	88	130	71	89	87
Mutsu .....	38	41	27	19	44	60	56	21
Northern Spy .....	81	78	73	88	97	120	120	110
Paulared .....	6	3	26	1	26	17	16	20
RI Greening .....	3	0	1	0	1	3	7	5
Rome .....	74	54	53	18	72	92	140	160
Sport Rome .....	48	90	60	35	55	65	77	35
Spartan .....	27	27	8	16	4	26	18	44
Winesap .....	1	5	3	13	13	16	7	10
Other .....	140	50	33	98	53	34	38	57
Unknown .....	13	47	30	23	2	19	15	34
<b>STATE</b>	<b>1,380</b>	<b>1,500</b>	<b>1,600</b>	<b>1,350</b>	<b>1,760</b>	<b>1,480</b>	<b>1,650</b>	<b>2,090</b>

**Table 6.****APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Cortland .....	2,800	2,000	2,900	1,100	1,900	3,000	1,700	1,300
Golden Delicious .....	31,000	36,200	41,700	31,300	25,200	27,300	12,600	29,000
Regular Delicious .....	1,300	100	4,800	4,100	8,700	3,600	13,000	12,200
Sport Red Delicious ..	33,700	46,500	66,500	73,700	79,700	64,400	54,600	105,000
Empire .....	29,700	30,600	23,300	15,100	19,900	21,400	39,100	46,700
Gala .....	40,300	56,600	26,900	21,300	27,600	4,800	600	200
Idared .....	7,200	7,300	11,400	5,900	9,600	14,600	22,300	24,800
Jonagold .....	36,800	15,300	3,300	2,200	3,900	1,400	0	200
Jonathan .....	11,100	21,800	18,200	8,500	11,300	6,200	18,800	13,900
Sport Jonathan .....	19,600	14,600	18,400	11,900	16,400	6,200	3,200	13,600
McIntosh .....	13,300	22,200	31,400	15,800	21,100	12,000	15,000	13,700
Mutsu .....	7,000	7,100	5,000	2,700	5,700	9,200	7,300	3,400
Northern Spy .....	14,300	15,700	13,100	14,300	14,600	15,000	15,000	15,000
Paulared .....	1,900	900	6,100	200	3,400	2,800	2,400	2,300
RI Greening .....	500	0	0	0	200	700	1,300	700
Rome .....	12,700	8,200	8,900	2,600	9,900	16,800	18,000	24,500
Sport Rome .....	10,800	19,800	10,500	5,700	9,700	8,800	12,400	7,200
Spartan .....	6,100	8,300	1,800	1,900	500	3,600	2,800	6,400
Winesap .....	100	700	400	1,800	1,700	1,600	900	1,200
Other .....	38,300	16,900	5,600	20,000	8,100	5,300	5,600	7,000
Unknown .....	1,900	7,800	4,700	3,700	200	3,500	3,000	9,900
<b>STATE</b>	<b>320,000</b>	<b>339,000</b>	<b>305,000</b>	<b>244,000</b>	<b>279,000</b>	<b>232,000</b>	<b>250,000</b>	<b>338,000</b>

**Table 5. APPLE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	23	12	36	41	32	230	480
Golden Delicious ....	160	170	600	600	850	2,020	5,740
Regular Delicious ....	110	66	240	340	640	3,790	5,520
Sport Red Delicious ..	500	680	1,760	1,060	620	1,490	9,000
Empire .....	340	270	550	130	31	36	2,640
Gala .....	5	1	9	1	15	0	670
Idared .....	200	210	1,520	910	500	770	4,760
Jonagold .....	0	11	1	2	0	0	250
Jonathan .....	68	74	250	320	460	5,610	7,430
Sport Jonathan .....	76	46	61	58	130	100	1,070
McIntosh .....	170	270	710	490	410	2,250	5,120
Mutsu .....	36	5	67	110	59	89	670
Northern Spy .....	160	52	250	240	430	1,970	3,870
Paulared .....	23	65	270	420	390	140	1,420
RI Greening .....	0	8	43	44	180	420	720
Rome .....	220	130	710	580	460	1,160	3,920
Sport Rome .....	43	51	250	110	41	67	1,030
Spartan .....	42	24	85	27	21	21	390
Winesap .....	3	10	36	80	160	640	1,000
Other .....	49	91	160	110	83	280	1,280
Unknown .....	13	21	70	51	130	580	1,050
<b>STATE .....</b>	<b>2,240</b>	<b>2,260</b>	<b>7,680</b>	<b>5,720</b>	<b>5,640</b>	<b>21,700</b>	<b>58,000</b>

**Table 6. APPLE TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Cortland .....	3,500	1,600	5,400	4,600	2,900	11,100	45,800
Golden Delicious ....	22,200	22,800	83,500	78,800	97,400	159,000	698,000
Regular Delicious ....	14,300	7,200	31,700	37,900	67,200	228,000	434,000
Sport Red Delicious ..	82,000	140,000	274,100	157,000	73,700	125,000	1,380,000
Empire .....	48,500	42,900	79,400	20,800	6,100	2,900	426,000
Gala .....	800	100	1,500	100	1,500	0	182,000
Idared .....	25,100	28,000	202,000	129,000	53,300	54,800	595,000
Jonagold .....	0	1,800	300	700	0	0	65,900
Jonathan .....	8,900	9,300	32,700	40,500	45,300	297,000	544,000
Sport Jonathan .....	11,100	7,500	8,400	8,200	13,300	9,400	162,000
McIntosh .....	27,400	37,300	103,000	65,700	45,800	112,000	536,000
Mutsu .....	4,800	700	10,200	12,800	6,400	7,500	89,800
Northern Spy .....	26,700	6,800	31,700	30,900	49,800	85,400	348,000
Paulared .....	3,000	8,100	34,900	60,000	46,600	15,100	188,000
RI Greening .....	0	1,600	5,000	3,700	20,800	30,900	65,400
Rome .....	31,700	18,800	93,400	80,300	44,200	68,300	438,000
Sport Rome .....	6,200	8,500	41,500	17,000	4,400	6,900	169,000
Spartan .....	5,200	2,700	13,200	3,400	2,500	1,800	60,200
Winesap .....	500	1,000	4,200	8,900	15,600	32,300	70,900
Other .....	6,900	14,000	22,900	15,300	9,700	16,600	192,000
Unknown .....	1,900	3,400	12,900	8,800	14,700	34,300	111,000
<b>STATE .....</b>	<b>331,000</b>	<b>364,000</b>	<b>1,090,000</b>	<b>784,000</b>	<b>621,000</b>	<b>1,300,000</b>	<b>6,800,000</b>

**Table 7.****APPLE ACRES BY ROOTSTOCK AND VARIETY**

VARIETY	Rootstock					Mark
	Seedling	111	106	7	26	
Cortland .....	210	43	30	59	18	3
Golden Delicious .....	1,470	1,040	950	890	300	70
Regular Delicious .....	3,330	490	470	350	64	15
Sport Red Delicious .....	1,080	2,260	1,530	1,810	840	130
Empire .....	43	600	300	860	340	52
Gala .....	2	93	49	110	230	84
Idared .....	820	920	790	860	260	11
Jonagold .....	0	28	18	69	60	48
Jonathan .....	4,860	640	520	490	85	51
Sport Jonathan .....	57	310	190	280	59	33
McIntosh .....	2,100	470	730	750	290	44
Mutsu .....	65	110	95	160	73	20
Northern Spy .....	1,700	200	590	560	240	120
Paulared .....	87	280	410	290	110	4
RI Greening .....	280	30	94	44	2	0
Rome .....	1,300	790	430	600	160	10
Sport Rome .....	67	310	170	280	91	8
Spartan .....	33	46	31	130	48	10
Winesap .....	630	78	88	91	28	3
Unknown .....	430	30	88	80	42	0
Other .....	250	150	190	230	120	32
<b>STATE</b> .....	<b>18,800</b>	<b>8,920</b>	<b>7,760</b>	<b>8,990</b>	<b>3,460</b>	<b>750</b>

**Table 8.****APPLE TREES BY ROOTSTOCK AND VARIETY**

VARIETY	Rootstock					Mark
	Seedling	111	106	7	26	
Cortland .....	8,700	5,000	4,500	8,900	3,900	700
Golden Delicious .....	95,700	131,000	130,000	122,000	61,700	25,400
Regular Delicious .....	182,000	53,300	56,800	42,900	9,700	3,700
Sport Red Delicious .....	92,300	299,000	258,000	292,000	215,000	21,300
Empire .....	6,400	78,800	45,700	131,000	73,700	19,300
Gala .....	500	13,800	7,200	20,900	80,300	30,900
Idared .....	69,100	110,000	98,100	117,000	48,200	2,500
Jonagold .....	0	4,200	2,800	11,900	21,500	18,000
Jonathan .....	223,000	72,000	68,000	67,700	14,500	13,500
Sport Jonathan .....	4,500	42,200	24,300	45,700	15,800	7,500
McIntosh .....	97,400	62,200	96,100	104,000	66,500	12,400
Mutsu .....	5,800	12,400	11,400	23,400	12,500	4,900
Northern Spy .....	58,800	24,400	73,300	70,000	40,500	26,000
Paulared .....	8,300	32,300	53,200	39,500	18,400	1,100
RI Greening .....	14,100	3,200	12,200	5,200	300	0
Rome .....	78,000	97,700	58,800	87,000	30,400	1,600
Sport Rome .....	7,700	49,800	26,700	42,300	18,900	2,300
Spartan .....	5,300	6,800	3,600	18,700	9,500	2,200
Winesap .....	30,000	7,700	11,200	9,200	3,800	400
Unknown .....	21,300	4,100	10,700	14,300	12,600	0
Other .....	14,600	19,600	25,700	38,500	30,900	14,700
<b>STATE</b> .....	<b>1,020,000</b>	<b>1,130,000</b>	<b>1,080,000</b>	<b>1,310,000</b>	<b>789,000</b>	<b>208,000</b>

**Table 7.****APPLE ACRES BY ROOTSTOCK AND VARIETY—Continued**

VARIETY	Rootstock				Total
	9	Interstem	Unknown	Other	
Cortland .....	2	3	110	1	480
Golden Delicious .....	120	38	780	87	5,740
Regular Delicious .....	92	110	560	38	5,520
Sport Red Delicious ..	230	65	980	70	9,000
Empire .....	67	47	330	1	2,640
Gala .....	11	7	82	3	670
Idared .....	130	72	890	11	4,760
Jonagold .....	14	1	9	0	250
Jonathan .....	58	43	590	87	7,430
Sport Jonathan .....	43	8	84	9	1,070
McIntosh .....	87	43	590	20	5,120
Mutsu .....	19	4	120	5	670
Northern Spy .....	54	18	380	6	3,870
Paulared .....	45	19	170	2	1,420
RI Greening .....	3	4	240	19	720
Rome .....	110	43	460	17	3,920
Sport Rome .....	52	13	37	5	1,030
Spartan .....	24	0	65	0	390
Winesap .....	7	1	75	3	1,000
Unknown .....	30	2	300	45	1,050
Other .....	62	8	220	19	1,280
<b>STATE</b> .....	<b>1,260</b>	<b>550</b>	<b>7,070</b>	<b>450</b>	<b>58,000</b>

**Table 8.****APPLE TREES BY ROOTSTOCK AND VARIETY—Continued**

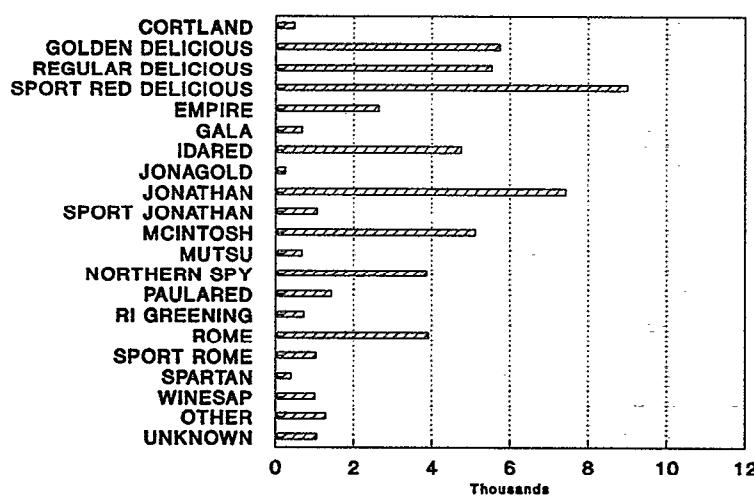
VARIETY	Rootstock				Total
	9	Interstem	Unknown	Other	
Cortland .....	300	400	13,100	300	45,800
Golden Delicious .....	20,300	4,600	96,600	11,000	698,000
Regular Delicious .....	9,800	16,200	55,300	4,100	434,000
Sport Red Delicious ..	50,500	9,500	125,000	13,200	1,380,000
Empire .....	15,600	10,200	44,700	200	426,000
Gala .....	6,100	7,200	14,600	900	182,000
Idared .....	28,800	13,800	106,000	1,400	595,000
Jonagold .....	5,900	400	1,200	0	65,900
Jonathan .....	10,600	5,300	61,000	8,400	544,000
Sport Jonathan .....	8,000	1,700	11,100	1,300	162,000
McIntosh .....	15,800	8,700	70,200	2,600	536,000
Mutsu .....	3,700	500	14,400	800	89,800
Northern Spy .....	6,600	2,800	45,000	1,000	348,000
Paulared .....	10,300	3,500	20,900	500	188,000
RI Greening .....	300	1,100	27,300	1,700	65,400
Rome .....	22,300	6,800	53,500	1,700	438,000
Sport Rome .....	12,300	2,000	7,000	400	169,000
Spartan .....	6,700	0	7,400	0	60,200
Winesap .....	800	200	7,300	300	70,900
Unknown .....	5,800	400	37,000	4,500	111,000
Other .....	11,900	2,100	29,800	4,300	192,000
<b>STATE</b> .....	<b>252,000</b>	<b>97,400</b>	<b>848,000</b>	<b>58,600</b>	<b>6,800,000</b>

**Table 9.****APPLE ACRES BY ROOTSTOCK, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	Rootstock					Mark
	Seedling	111	106	7	26	
Benzie .....	430	64	280	110	60	20
Grand Traverse ....	240	64	220	130	64	5
Leelanau .....	230	340	600	160	210	32
Manistee .....	1,030	240	410	82	54	19
Others .....	230	88	130	68	25	8
<b>NORTHWEST</b>	<b>2,160</b>	<b>800</b>	<b>1,640</b>	<b>550</b>	<b>410</b>	<b>84</b>
Ionia .....	680	400	80	200	72	27
Kent .....	3,510	1,850	1,080	2,440	1,200	170
Mason .....	530	330	95	150	17	3
Montcalm and Mecosta .....	200	96	330	220	51	9
Muskegon .....	980	320	66	710	48	3
Newaygo .....	590	570	170	250	110	27
Oceana .....	1,070	370	530	500	36	14
Ottawa .....	1,130	330	430	660	430	82
<b>WEST CENTRAL</b>	<b>8,690</b>	<b>4,270</b>	<b>2,780</b>	<b>5,130</b>	<b>1,960</b>	<b>340</b>

**Table 10.****APPLE TREES BY ROOTSTOCK, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	Rootstock					Mark
	Seedling	111	106	7	26	
Benzie .....	20,200	9,000	45,000	21,800	14,700	4,100
Grand Traverse ....	13,800	7,800	25,200	17,000	17,000	5,200
Leelanau .....	13,900	56,100	81,400	22,500	51,300	8,300
Manistee .....	46,300	30,000	53,100	11,800	5,300	4,700
Others .....	10,500	10,000	16,000	7,900	3,300	1,200
<b>NORTHWEST</b>	<b>105,000</b>	<b>113,000</b>	<b>221,000</b>	<b>81,000</b>	<b>91,600</b>	<b>23,500</b>
Ionia .....	28,000	42,100	10,800	22,900	19,300	7,000
Kent .....	208,000	228,000	160,000	384,000	282,000	56,000
Mason .....	28,400	46,700	13,000	25,200	3,000	500
Montcalm and Mecosta .....	13,700	13,400	43,000	32,400	12,700	1,200
Muskegon .....	72,000	37,500	9,600	92,900	7,700	500
Newaygo .....	35,500	73,700	22,900	32,600	20,000	5,200
Oceana .....	68,500	51,100	68,200	78,600	6,600	2,800
Ottawa .....	46,500	46,800	61,000	104,000	84,300	21,200
<b>WEST CENTRAL</b>	<b>501,000</b>	<b>539,000</b>	<b>389,000</b>	<b>773,000</b>	<b>436,000</b>	<b>94,400</b>

**1991 APPLE VARIETIES  
(ACRES)**

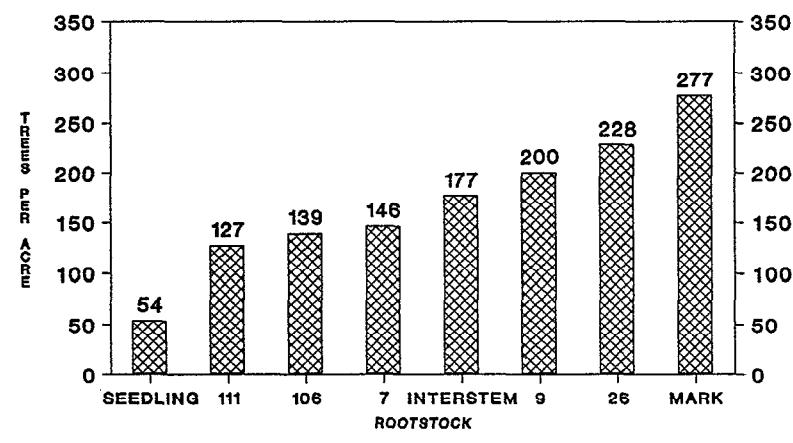
**Table 9. APPLE ACRES BY ROOTSTOCK, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	Rootstock				Total
	9	Interstem	Unknown	Other	
Benzie .....	13	13	160	8	1,160
Grand Traverse .....	6	3	410	10	1,150
Leelanau .....	0	0	550	0	2,120
Manistee .....	0	20	190	0	2,050
Others .....	1	2	190	0	740
<b>NORTHWEST</b>	<b>20</b>	<b>38</b>	<b>1,500</b>	<b>18</b>	<b>7,220</b>
Ionia .....	28	68	430	0	1,990
Kent .....	320	23	1,130	35	11,800
Mason .....	70	1	290	2	1,490
Montcalm and Mecosta .....	0	1	41	15	960
Muskegon .....	0	1	81	45	2,250
Newaygo .....	16	0	170	11	1,910
Oceana .....	21	1	610	110	3,260
Ottawa .....	180	19	560	0	3,820
<b>WEST CENTRAL</b>	<b>640</b>	<b>110</b>	<b>3,310</b>	<b>220</b>	<b>27,400</b>

**Table 10. APPLE TREES BY ROOTSTOCK, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	Rootstock				Total
	9	Interstem	Unknown	Other	
Benzie .....	1,900	2,100	14,300	2,000	135,000
Grand Traverse .....	1,400	400	51,500	2,000	141,000
Leelanau .....	0	0	74,500	0	308,000
Manistee .....	0	2,600	25,200	0	179,000
Others .....	200	300	24,600	0	74,000
<b>NORTHWEST</b>	<b>3,500</b>	<b>5,400</b>	<b>190,000</b>	<b>4,000</b>	<b>838,000</b>
Ionia .....	2,500	10,800	57,500	0	201,000
Kent .....	96,400	9,500	130,000	7,300	1,560,000
Mason .....	10,100	300	37,300	400	165,000
Montcalm and Mecosta .....	0	100	5,700	2,400	125,000
Muskegon .....	0	300	9,800	5,100	235,000
Newaygo .....	1,700	0	22,200	1,700	215,000
Oceana .....	3,700	200	71,800	14,300	366,000
Ottawa .....	44,100	3,600	66,100	0	478,000
<b>WEST CENTRAL</b>	<b>158,000</b>	<b>24,800</b>	<b>400,000</b>	<b>31,200</b>	<b>3,350,000</b>

### DENSITIES BY APPLE ROOTSTOCK AVERAGE TREES PER ACRE



**Table 9.****APPLE ACRES BY ROOTSTOCK, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	Rootstock					Mark
	Seedling	111	106	7	26	
Allegan .....	670	350	210	140	80	21
Berrien .....	2,980	1,450	930	1,170	270	150
Van Buren .....	2,040	1,320	1,270	960	270	54
Others .....	480	380	320	310	24	3
<b>SOUTHWEST</b>	<b>6,170</b>	<b>3,500</b>	<b>2,730</b>	<b>2,580</b>	<b>640</b>	<b>230</b>
North .....	75	3	9	13	15	5
Saginaw Bay .....	110	6	32	12	8	1
Central .....	240	41	28	120	160	15
West Thumb .....	330	26	59	130	59	28
East Thumb .....	630	15	360	63	120	3
South Central .....	230	160	27	160	2	1
Southeast .....	190	95	100	230	90	43
<b>EAST</b>	<b>1,800</b>	<b>350</b>	<b>610</b>	<b>730</b>	<b>450</b>	<b>96</b>
<b>STATE</b>	<b>18,800</b>	<b>8,920</b>	<b>7,760</b>	<b>8,990</b>	<b>3,460</b>	<b>750</b>

**Table 10.****APPLE TREES BY ROOTSTOCK, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	Rootstock					Mark
	Seedling	111	106	7	26	
Allegan .....	30,600	43,400	28,000	20,200	20,400	6,300
Berrien .....	159,000	171,000	124,000	152,000	55,500	34,000
Van Buren .....	119,000	167,000	203,000	137,000	92,900	24,400
Others .....	31,700	47,800	41,900	42,300	3,700	600
<b>SOUTHWEST</b>	<b>340,000</b>	<b>429,000</b>	<b>397,000</b>	<b>352,000</b>	<b>172,000</b>	<b>65,300</b>
North .....	6,100	600	1,900	2,200	3,200	1,400
Saginaw Bay .....	4,700	900	4,200	1,300	1,200	100
Central .....	8,200	3,000	3,600	24,100	33,200	1,200
West Thumb .....	10,300	3,800	6,700	16,400	10,600	9,800
East Thumb .....	26,200	2,200	40,600	8,900	18,200	600
South Central .....	9,500	18,400	2,400	19,800	300	200
Southeast .....	12,200	19,100	13,800	32,400	22,300	11,800
<b>EAST</b>	<b>77,200</b>	<b>48,000</b>	<b>73,200</b>	<b>105,000</b>	<b>89,000</b>	<b>25,100</b>
<b>STATE</b>	<b>1,020,000</b>	<b>1,130,000</b>	<b>1,080,000</b>	<b>1,310,000</b>	<b>789,000</b>	<b>208,000</b>

**Table 11.****OTHER APPLE VARIETIES**

VARIETY	Acres	Trees
Akane (Prime Red) ..	16	1,700
Baldwin .....	8	300
Braeburn .....	16	6,800
Connell Red .....	19	2,000
Criterion .....	5	1,000
Early Blaze .....	15	1,500
Early Gold .....	29	6,400
Elstar .....	13	2,900
Fenton .....	30	2,300

**Table 11.****OTHER APPLE VARIETIES-Continued**

VARIETY	Acres	Trees
Fuji .....	70	17,400
Ginger Gold .....	27	10,200
Golden Russet .....	8	1,500
Granny Smith .....	120	15,800
Grimes Golden .....	19	1,200
Jersey Mac .....	180	27,700
Jonafree .....	12	1,700
Jonamac .....	140	20,900
Liberty .....	3	500

**Table 9. APPLE ACRES BY ROOTSTOCK, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	Rootstock				Total
	9	Interstem	Unknown	Other	
Allegan .....	29	3	200	7	1,710
Berrien .....	180	82	780	6	8,000
Van Buren .....	40	8	310	100	6,370
Others .....	26	0	140	0	1,680
<b>SOUTHWEST</b>	<b>280</b>	<b>93</b>	<b>1,430</b>	<b>120</b>	<b>17,800</b>
North .....	2	0	5	0	130
Saginaw Bay .....	0	0	23	0	190
Central .....	51	4	230	0	890
West Thumb .....	120	130	80	0	960
East Thumb .....	140	34	310	90	1,760
South Central .....	0	70	50	0	700
Southeast .....	2	67	130	1	950
<b>EAST</b>	<b>320</b>	<b>310</b>	<b>830</b>	<b>91</b>	<b>5,580</b>
<b>STATE</b>	<b>1,260</b>	<b>550</b>	<b>7,070</b>	<b>450</b>	<b>58,000</b>

**Table 10. APPLE TREES BY ROOTSTOCK, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	Rootstock				Total
	9	Interstem	Unknown	Other	
Allegan .....	4,500	600	18,800	1,500	174,000
Berrien .....	28,600	10,500	82,900	700	818,000
Van Buren .....	15,400	2,500	39,300	11,800	812,000
Others .....	5,300	100	19,400	0	193,000
<b>SOUTHWEST</b>	<b>53,800</b>	<b>13,700</b>	<b>160,000</b>	<b>14,000</b>	<b>2,000,000</b>
North .....	500	0	600	0	16,500
Saginaw Bay .....	0	0	3,900	0	16,300
Central .....	4,600	900	25,600	0	104,000
West Thumb .....	16,700	29,200	6,400	0	110,000
East Thumb .....	14,500	2,300	34,200	9,300	157,000
South Central .....	0	8,600	6,000	0	65,200
Southeast .....	600	12,500	21,800	100	147,000
<b>EAST</b>	<b>36,900</b>	<b>53,500</b>	<b>98,500</b>	<b>9,400</b>	<b>616,000</b>
<b>STATE</b>	<b>252,000</b>	<b>97,400</b>	<b>848,000</b>	<b>58,600</b>	<b>6,800,000</b>

**Table 11. OTHER APPLE VARIETIES—Continued**

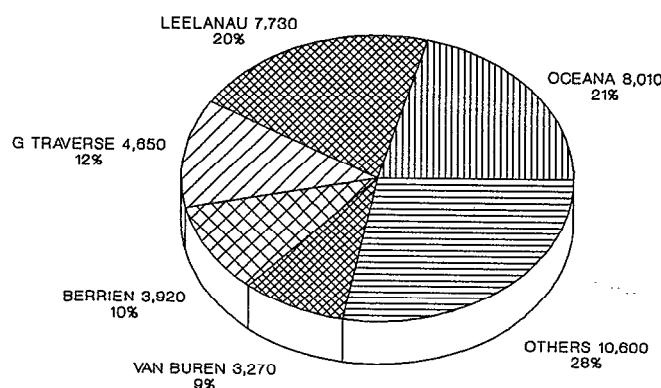
VARIETY	Acres	Trees
Lodi .....	14	1,500
Macoun .....	4	600
Newton Pippin .....	4	500
Ozark Gold .....	50	7,500
Snow .....	11	900
Spigold .....	4	500
Steele Red .....	15	600
Transparent .....	7	300
Tyderman Red .....	13	1,300

**Table 11. OTHER APPLE VARIETIES—Continued**

VARIETY	Acres	Trees
Viking .....	19	1,300
Vista Bella .....	4	500
Wagner .....	7	500
Wayne .....	49	5,700
Wealthy .....	29	1,000
Winter Banana .....	37	3,400
Wolf River .....	10	500
All Others .....	270	43,600
<b>TOTAL</b>	<b>1,280</b>	<b>192,000</b>

# TART CHERRIES

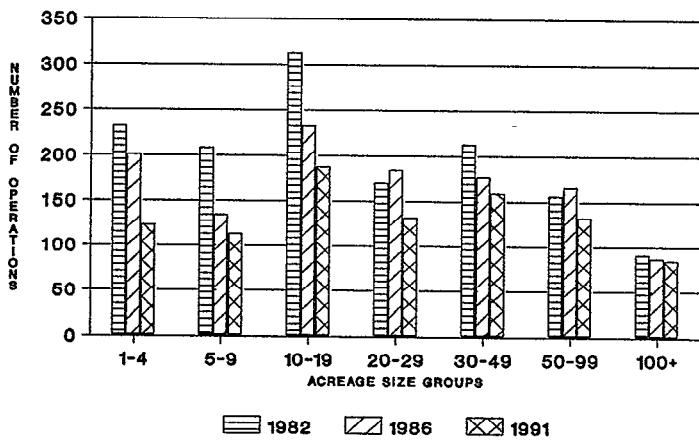
## TOP TART CHERRY COUNTIES ACRES AND PERCENT



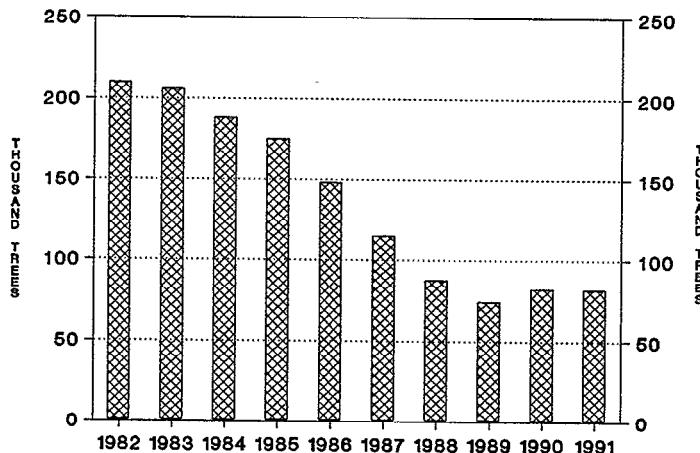
**Table 12.** TART CHERRY OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups								TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	200+	
1991 Operations .....	123	113	188	132	159	133	65	20	933
Acres .....	220	750	2,630	3,050	6,050	9,250	8,500	7,750	38,200
1986 Operations .....	201	135	233	184	177	166	61	26	1,183
Acres .....	400	890	3,220	4,360	6,730	11,470	7,990	8,940	44,000
1982 Operations .....	232	208	313	170	213	156	64	27	1,383
Acres .....	500	1,335	4,186	3,968	7,909	10,730	8,687	9,404	46,719

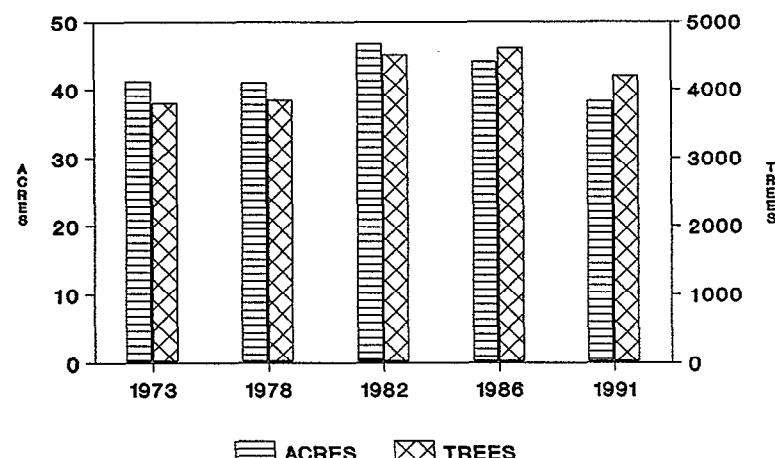
MICHIGAN TART CHERRIES  
OPERATIONS BY ACREAGE SIZE GROUP



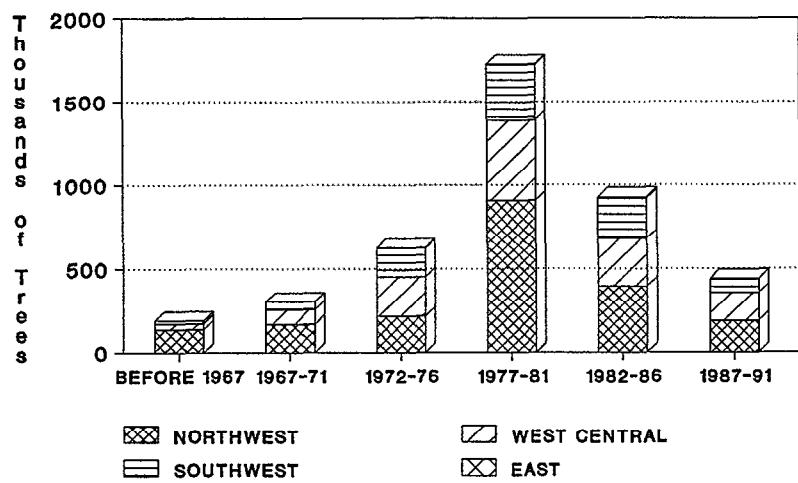
TART CHERRY TREES  
BY YEAR OF PLANTING



**MICHIGAN TART CHERRIES  
ACRES AND TREES  
(Thousands)**



**TART CHERRIES BY YEAR  
COHORT AND BY AREA**

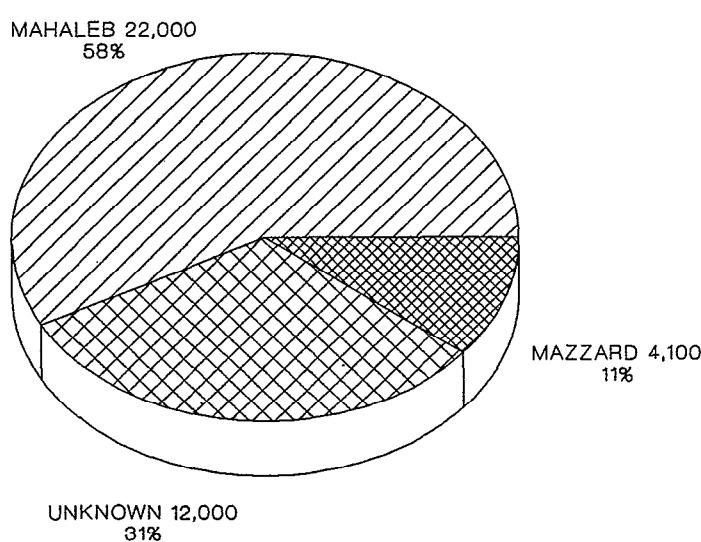


**TART CHERRY ROOTSTOCKS  
ACRES AND PERCENTS**

**TART CHERRY  
VARIETIES**

Table 13.

VARIETY	Acres	Trees
Montmorency .....	37,700	4,140,700
Galaxy .....	280	33,600
All Others .....	220	25,700
<b>TOTAL .....</b>	<b>38,200</b>	<b>4,200,000</b>



**Table 14.****TART CHERRY ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Antrim <sup>1</sup> .....	60	51	27	57	45	48	89	66
Benzie .....	2	1	28	7	25	64	21	48
Grand Traverse .....	77	120	77	98	120	200	140	160
Leelanau .....	100	170	110	150	170	210	310	370
Manistee .....	3	46	4	25	18	32	55	85
<b>NORTHWEST</b> .....	<b>240</b>	<b>390</b>	<b>250</b>	<b>340</b>	<b>380</b>	<b>550</b>	<b>620</b>	<b>730</b>
Kent .....	32	15	33	5	22	5	10	35
Mason .....	120	33	30	19	39	59	4	41
Muskegon .....	0	0	1	0	9	47	27	8
Newaygo .....	0	1	0	12	0	24	10	5
Oceana .....	140	120	250	260	340	310	380	320
Others .....	0	0	0	17	0	19	0	13
<b>WEST CENTRAL</b> .....	<b>290</b>	<b>170</b>	<b>310</b>	<b>310</b>	<b>410</b>	<b>460</b>	<b>430</b>	<b>420</b>
Allegan .....	9	5	2	7	4	32	12	10
Berrien .....	100	74	55	36	74	170	260	200
Cass .....	1	48	0	3	15	0	18	30
Kalamazoo .....	0	0	0	1	18	2	19	17
Van Buren .....	34	27	16	71	140	95	140	200
<b>SOUTHWEST</b> .....	<b>140</b>	<b>150</b>	<b>73</b>	<b>120</b>	<b>250</b>	<b>300</b>	<b>450</b>	<b>460</b>
<b>EAST</b> .....	0	1	4	0	0	12	22	6
<b>STATE</b> .....	<b>670</b>	<b>710</b>	<b>640</b>	<b>770</b>	<b>1,040</b>	<b>1,320</b>	<b>1,520</b>	<b>1,620</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**Table 15.****TART CHERRY TREES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Antrim <sup>1</sup> .....	6,600	5,200	2,800	5,900	5,000	4,900	9,200	8,100
Benzie .....	200	100	3,300	1,000	3,100	8,500	2,600	6,500
Grand Traverse .....	9,400	14,000	9,600	10,900	14,600	20,800	16,500	17,000
Leelanau .....	13,100	21,600	13,300	16,400	17,400	23,500	35,600	46,500
Manistee .....	400	4,300	400	2,600	2,100	3,100	5,800	11,500
<b>NORTHWEST</b> .....	<b>29,700</b>	<b>45,200</b>	<b>29,400</b>	<b>36,800</b>	<b>42,200</b>	<b>60,800</b>	<b>69,700</b>	<b>89,600</b>
Kent .....	4,300	2,000	3,900	600	2,400	400	1,000	3,500
Mason .....	15,000	3,700	3,700	2,200	4,200	6,900	600	4,600
Muskegon .....	0	0	200	0	1,900	4,600	3,000	1,000
Newaygo .....	0	100	0	1,200	0	3,200	1,600	500
Oceana .....	16,300	13,700	26,600	31,900	36,600	35,700	43,400	36,300
Others .....	0	0	0	1,700	0	2,500	0	1,400
<b>WEST CENTRAL</b> .....	<b>35,600</b>	<b>19,500</b>	<b>34,400</b>	<b>37,600</b>	<b>45,100</b>	<b>53,300</b>	<b>49,600</b>	<b>47,300</b>
Allegan .....	1,100	500	200	700	400	3,500	1,300	1,100
Berrien .....	11,300	8,400	7,600	4,100	8,100	18,700	31,500	23,700
Cass .....	100	5,500	0	300	1,700	0	1,900	3,400
Kalamazoo .....	0	0	0	100	2,100	300	2,100	2,200
Van Buren .....	3,500	2,500	1,800	7,600	15,100	10,200	14,400	20,200
<b>SOUTHWEST</b> .....	<b>16,000</b>	<b>16,900</b>	<b>9,600</b>	<b>12,800</b>	<b>27,400</b>	<b>32,700</b>	<b>51,200</b>	<b>50,600</b>
<b>EAST</b> .....	0	100	400	0	0	1,600	4,300	600
<b>STATE</b> .....	<b>81,300</b>	<b>81,700</b>	<b>73,800</b>	<b>87,200</b>	<b>115,000</b>	<b>148,000</b>	<b>175,000</b>	<b>188,000</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**Table 14.** TART CHERRY ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Antrim <sup>1</sup> .....	120	200	1,240	290	230	88	2,610
Benzie .....	33	73	680	160	32	81	1,260
Grand Traverse .....	160	270	1,720	640	480	390	4,650
Leelanau .....	290	260	3,310	770	720	790	7,730
Manistee .....	40	66	760	160	170	120	1,580
<b>NORTHWEST</b> .....	<b>640</b>	<b>870</b>	<b>7,710</b>	<b>2,020</b>	<b>1,630</b>	<b>1,470</b>	<b>17,800</b>
Kent .....	35	25	250	120	25	10	620
Mason .....	57	130	740	450	150	82	1,960
Muskegon .....	23	34	160	130	95	83	620
Newaygo .....	5	1	160	140	57	13	430
Oceana .....	450	400	2,890	1,440	520	190	8,010
Others .....	33	41	120	17	7	5	270
<b>WEST CENTRAL</b> .....	<b>600</b>	<b>630</b>	<b>4,320</b>	<b>2,300</b>	<b>850</b>	<b>380</b>	<b>11,900</b>
Allegan .....	7	16	200	89	33	60	480
Berrien .....	210	200	1,260	900	290	86	3,920
Cass .....	25	11	230	38	13	0	430
Kalamazoo .....	5	13	53	33	4	6	170
Van Buren .....	320	140	1,370	590	120	9	3,270
<b>SOUTHWEST</b> .....	<b>570</b>	<b>380</b>	<b>3,110</b>	<b>1,650</b>	<b>460</b>	<b>160</b>	<b>8,270</b>
<b>EAST</b> .....	<b>7</b>	<b>7</b>	<b>47</b>	<b>39</b>	<b>21</b>	<b>17</b>	<b>180</b>
<b>STATE</b> .....	<b>1,820</b>	<b>1,890</b>	<b>15,200</b>	<b>6,010</b>	<b>2,960</b>	<b>2,030</b>	<b>38,200</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**Table 15.** TART CHERRY TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Antrim <sup>1</sup> .....	13,100	22,000	137,000	31,000	24,100	8,800	284,000
Benzie .....	4,300	9,700	92,900	16,700	3,900	6,900	160,000
Grand Traverse .....	18,000	33,900	199,000	68,500	51,000	37,800	521,000
Leelanau .....	34,200	29,700	398,000	80,000	72,700	70,400	872,000
Manistee .....	3,700	6,600	79,400	15,900	15,200	10,200	161,000
<b>NORTHWEST</b> .....	<b>73,300</b>	<b>102,000</b>	<b>905,000</b>	<b>212,000</b>	<b>167,000</b>	<b>134,000</b>	<b>1,998,000</b>
Kent .....	4,000	2,500	24,800	11,800	2,400	900	64,500
Mason .....	7,100	14,300	88,200	46,900	15,300	7,900	221,000
Muskegon .....	2,400	3,000	17,900	14,500	8,900	7,200	64,600
Newaygo .....	700	100	18,900	14,800	5,800	1,100	48,000
Oceana .....	50,400	45,600	317,000	150,000	53,800	17,800	875,000
Others .....	3,600	4,400	11,900	1,600	700	400	28,200
<b>WEST CENTRAL</b> .....	<b>68,200</b>	<b>69,900</b>	<b>479,000</b>	<b>240,000</b>	<b>86,900</b>	<b>35,300</b>	<b>1,300,000</b>
Allegan .....	700	1,700	19,400	8,600	3,000	6,000	48,200
Berrien .....	24,400	19,700	144,000	96,500	31,300	8,500	438,000
Cass .....	2,900	1,200	23,100	3,800	1,400	0	45,300
Kalamazoo .....	700	1,500	5,800	4,200	400	900	20,300
Van Buren .....	35,100	13,600	141,000	59,900	11,000	800	337,000
<b>SOUTHWEST</b> .....	<b>63,800</b>	<b>37,700</b>	<b>333,000</b>	<b>173,000</b>	<b>47,100</b>	<b>16,200</b>	<b>889,000</b>
<b>EAST</b> .....	<b>600</b>	<b>700</b>	<b>5,000</b>	<b>3,400</b>	<b>2,000</b>	<b>1,600</b>	<b>20,300</b>
<b>STATE</b> .....	<b>206,000</b>	<b>210,000</b>	<b>1,720,000</b>	<b>628,000</b>	<b>303,000</b>	<b>187,000</b>	<b>4,200,000</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**Table 16.****TART CHERRY ACRES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT**

ROOTSTOCK AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Mahaleb .....	160	240	130	170	220	290	300	410
Mazzard .....	28	78	59	76	29	79	130	89
Other .....	7	1	0	22	3	0	2	0
Unknown .....	48	66	56	70	130	180	190	230
<b>NORTHWEST</b>	<b>240</b>	<b>390</b>	<b>250</b>	<b>340</b>	<b>380</b>	<b>550</b>	<b>620</b>	<b>730</b>
Mahaleb .....	240	76	190	250	300	260	270	210
Mazzard .....	27	25	23	20	50	41	35	42
Other .....	7	10	10	0	11	0	0	0
Unknown .....	20	60	82	43	53	160	130	170
<b>WEST CENTRAL</b>	<b>290</b>	<b>170</b>	<b>310</b>	<b>310</b>	<b>410</b>	<b>460</b>	<b>430</b>	<b>420</b>
Mahaleb .....	110	69	72	88	210	220	350	300
Mazzard .....	16	57	5	3	31	32	26	43
Other .....	9	0	0	4	0	10	12	0
Unknown .....	6	26	0	25	5	53	87	130
<b>SOUTHWEST AND EAST</b>	<b>140</b>	<b>150</b>	<b>77</b>	<b>120</b>	<b>250</b>	<b>310</b>	<b>470</b>	<b>470</b>
Mahaleb .....	510	380	390	510	730	770	920	920
Mazzard .....	71	160	87	99	110	150	190	170
Other .....	22	11	11	26	13	10	14	0
Unknown .....	74	150	140	140	190	390	410	530
<b>STATE</b>	<b>670</b>	<b>710</b>	<b>640</b>	<b>770</b>	<b>1,040</b>	<b>1,320</b>	<b>1,520</b>	<b>1,620</b>

**Table 17.****TART CHERRY TREES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT**

ROOTSTOCK AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Mahaleb .....	18,800	28,900	15,100	19,100	24,300	33,000	34,800	51,800
Mazzard .....	3,300	8,400	7,600	7,700	3,400	7,700	12,600	9,400
Other .....	1,800	100	100	2,300	200	0	200	0
Unknown .....	5,800	7,800	6,600	7,800	14,300	20,100	22,200	28,400
<b>NORTHWEST</b>	<b>29,700</b>	<b>45,200</b>	<b>29,400</b>	<b>36,800</b>	<b>42,200</b>	<b>60,800</b>	<b>69,700</b>	<b>89,600</b>
Mahaleb .....	29,100	8,800	21,300	30,500	33,100	31,300	32,400	24,600
Mazzard .....	3,300	3,100	3,200	2,300	5,600	4,500	3,800	4,400
Other .....	800	1,100	1,300	0	1,300	0	0	0
Unknown .....	2,500	6,400	8,600	4,800	5,100	17,500	13,400	18,300
<b>WEST CENTRAL</b>	<b>35,600</b>	<b>19,500</b>	<b>34,400</b>	<b>37,600</b>	<b>45,100</b>	<b>53,300</b>	<b>49,600</b>	<b>47,300</b>
Mahaleb .....	12,500	6,900	9,500	9,600	23,600	24,000	39,600	33,200
Mazzard .....	1,700	6,600	500	300	3,400	3,500	4,100	3,700
Other .....	1,100	0	0	500	0	1,000	1,400	0
Unknown .....	800	3,500	0	2,400	400	5,900	10,500	14,400
<b>SOUTHWEST AND EAST</b>	<b>16,000</b>	<b>17,000</b>	<b>10,000</b>	<b>12,800</b>	<b>27,400</b>	<b>34,300</b>	<b>55,500</b>	<b>51,200</b>
Mahaleb .....	60,400	44,600	45,900	59,200	81,000	88,300	107,000	110,000
Mazzard .....	8,300	18,100	11,300	10,300	12,400	15,700	20,500	17,500
Other .....	3,700	1,200	1,400	2,800	1,500	1,000	1,600	0
Unknown .....	9,100	17,700	15,200	15,000	19,800	43,500	46,100	61,100
<b>STATE</b>	<b>81,300</b>	<b>81,700</b>	<b>73,800</b>	<b>87,200</b>	<b>115,000</b>	<b>148,000</b>	<b>175,000</b>	<b>188,000</b>

**Table 16.** TART CHERRY ACRES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT—Continued

ROOTSTOCK AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Mahaleb .....	230	360	4,230	1,070	730	730	9,270
Mazzard .....	87	100	820	180	250	150	2,150
Other .....	0	0	13	1	0	0	48
Unknown .....	320	410	2,650	770	650	590	6,360
<b>NORTHWEST</b>	<b>640</b>	<b>870</b>	<b>7,710</b>	<b>2,020</b>	<b>1,630</b>	<b>1,470</b>	<b>17,800</b>
Mahaleb .....	430	330	2,540	1,020	520	210	6,850
Mazzard .....	47	22	410	350	38	32	1,160
Other .....	1	0	0	0	0	0	39
Unknown .....	120	280	1,370	930	290	140	3,850
<b>WEST CENTRAL</b>	<b>600</b>	<b>630</b>	<b>4,320</b>	<b>2,300</b>	<b>850</b>	<b>380</b>	<b>11,900</b>
Mahaleb .....	400	290	2,240	1,160	250	99	5,860
Mazzard .....	110	29	210	100	110	9	780
Other .....	0	0	27	0	0	0	62
Unknown .....	62	71	680	430	110	68	1,750
<b>SOUTHWEST AND EAST</b>	<b>570</b>	<b>390</b>	<b>3,160</b>	<b>1,690</b>	<b>470</b>	<b>180</b>	<b>8,450</b>
Mahaleb .....	1,060	980	9,010	3,250	1,500	1,040	22,000
Mazzard .....	250	150	1,440	630	400	190	4,100
Other .....	1	0	40	1	0	0	150
Unknown .....	500	760	4,700	2,130	1,050	800	12,000
<b>STATE</b>	<b>1,320</b>	<b>1,890</b>	<b>15,200</b>	<b>6,010</b>	<b>2,960</b>	<b>2,030</b>	<b>38,200</b>

**Table 17.** TART CHERRY TREES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT—Continued

ROOTSTOCK AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Mahaleb .....	26,800	41,000	507,000	115,000	72,600	65,300	1,050,000
Mazzard .....	10,000	10,700	91,700	18,800	25,600	15,300	232,000
Other .....	0	0	1,500	100	0	0	6,300
Unknown .....	36,500	50,300	306,000	77,900	68,800	53,400	706,000
<b>NORTHWEST</b>	<b>73,300</b>	<b>102,000</b>	<b>906,000</b>	<b>212,000</b>	<b>167,000</b>	<b>134,000</b>	<b>2,000,000</b>
Mahaleb .....	49,700	36,900	289,000	110,000	54,600	18,800	770,000
Mazzard .....	5,100	2,300	43,200	34,500	3,400	3,200	122,000
Other .....	100	0	0	0	0	0	4,600
Unknown .....	13,400	30,700	147,000	95,200	28,900	13,300	405,000
<b>WEST CENTRAL</b>	<b>68,200</b>	<b>69,900</b>	<b>479,000</b>	<b>240,000</b>	<b>86,900</b>	<b>35,300</b>	<b>1,300,000</b>
Mahaleb .....	45,300	28,600	238,000	121,000	27,200	10,100	629,000
Mazzard .....	12,600	2,800	21,900	9,000	10,300	700	81,100
Other .....	0	0	4,800	0	0	0	8,800
Unknown .....	6,500	7,000	73,100	46,200	11,500	7,000	189,000
<b>SOUTHWEST AND EAST</b>	<b>64,400</b>	<b>38,400</b>	<b>338,000</b>	<b>176,400</b>	<b>49,100</b>	<b>17,800</b>	<b>908,000</b>
Mahaleb .....	122,000	106,000	1,030,000	346,000	154,000	94,200	2,450,000
Mazzard .....	27,700	15,800	157,000	62,300	39,300	19,200	435,000
Other .....	100	0	6,300	100	0	0	19,700
Unknown .....	56,400	88,000	526,000	219,000	109,000	73,700	1,300,000
<b>STATE</b>	<b>206,000</b>	<b>210,000</b>	<b>1,720,000</b>	<b>628,000</b>	<b>303,000</b>	<b>187,000</b>	<b>4,200,000</b>

# SWEET CHERRIES

Acres planted to sweet cherries dropped 15 percent since 1986, and the number of trees fell by 8 percent. Trees per acre topped one hundred for the first time. Over 60 percent of the trees were in Grand Traverse and Leelanau Counties.

Rootstock data were garnered for 57 percent of the 9,050 sweet cherry acres. Of the known rootstock types, 59 percent of trees were Mazzard, 40 percent were Mahaleb seedling, and 1 percent were others. The three most prevalent sweet cherry varieties were Gold, Napoleon, and Emperor Francis. These accounted for about 60 percent of the 847 thousand sweet cherry trees.

Table 18.

## OTHER SWEET CHERRY VARIETIES

VARIETY	Acres	Trees
Vega .....	50	4,200
Hardy Giant .....	90	8,600
Nelson .....	80	6,800
Cavalier .....	80	8,800
Vista .....	20	1,500
All Others .....	50	5,200
<b>TOTAL .....</b>	<b>370</b>	<b>35,100</b>

Table 19.

## SWEET CHERRY ACRES BY YEAR PLANTED, COUNTY AND DISTRICT

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Antrim <sup>1</sup> .....	33	4	49	32	25	16	11	16
Benzie .....	0	10	12	2	1	7	14	0
Grand Traverse ....	39	59	49	92	31	65	61	60
Leelanau .....	9	100	130	140	100	64	140	120
Manistee .....	14	8	5	3	27	10	40	0
<b>NORTHWEST .....</b>	<b>95</b>	<b>180</b>	<b>250</b>	<b>270</b>	<b>180</b>	<b>160</b>	<b>270</b>	<b>200</b>
Mason .....	3	32	26	10	9	4	2	4
Oceana .....	23	49	110	20	5	8	8	14
Others .....	2	3	4	1	12	8	3	15
<b>WEST CENTRAL .....</b>	<b>29</b>	<b>85</b>	<b>140</b>	<b>31</b>	<b>25</b>	<b>21</b>	<b>13</b>	<b>33</b>
Berrien .....	4	0	2	5	1	5	22	2
Van Buren .....	1	0	0	0	1	2	2	1
Others .....	1	0	2	2	1	0	3	0
<b>SOUTHWEST .....</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>3</b>	<b>7</b>	<b>27</b>	<b>3</b>
<b>EAST .....</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>8</b>	<b>5</b>	<b>4</b>
<b>STATE .....</b>	<b>130</b>	<b>260</b>	<b>400</b>	<b>310</b>	<b>210</b>	<b>200</b>	<b>310</b>	<b>240</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

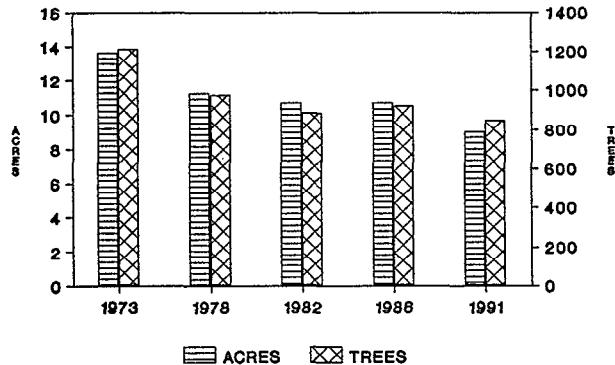
Table 20.

## SWEET CHERRY TREES BY YEAR PLANTED, COUNTY AND DISTRICT

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Antrim <sup>1</sup> .....	3,000	400	5,700	3,200	2,200	1,500	1,100	1,500
Benzie .....	0	1,200	1,100	200	100	700	1,400	0
Grand Traverse ....	4,100	6,100	5,000	9,000	3,200	6,200	5,400	5,700
Leelanau .....	900	9,900	13,600	14,100	10,600	6,400	13,700	12,400
Manistee .....	1,300	1,000	500	200	2,700	800	3,900	100
<b>NORTHWEST .....</b>	<b>9,400</b>	<b>18,600</b>	<b>26,000</b>	<b>26,700</b>	<b>18,900</b>	<b>15,500</b>	<b>25,500</b>	<b>19,700</b>
Mason .....	300	3,600	4,100	1,400	1,300	400	300	400
Oceana .....	2,200	4,500	11,900	2,100	500	900	900	1,400
Others .....	200	400	400	100	1,000	800	300	3,100
<b>WEST CENTRAL .....</b>	<b>2,700</b>	<b>8,500</b>	<b>16,400</b>	<b>3,600</b>	<b>2,800</b>	<b>2,100</b>	<b>1,400</b>	<b>4,900</b>
Berrien .....	400	0	200	600	100	400	2,600	300
Van Buren .....	100	0	0	0	100	100	100	100
Others .....	200	0	100	300	100	0	300	0
<b>SOUTHWEST .....</b>	<b>700</b>	<b>0</b>	<b>300</b>	<b>900</b>	<b>300</b>	<b>600</b>	<b>3,100</b>	<b>400</b>
<b>EAST .....</b>	<b>0</b>	<b>100</b>	<b>400</b>	<b>300</b>	<b>300</b>	<b>400</b>	<b>1,000</b>	<b>500</b>
<b>STATE .....</b>	<b>12,800</b>	<b>27,200</b>	<b>43,100</b>	<b>31,500</b>	<b>22,300</b>	<b>18,600</b>	<b>31,000</b>	<b>25,500</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**MICHIGAN SWEET CHERRIES**  
**ACRES AND TREES**  
 (Thousands)



**Table 19.** SWEET CHERRY ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Antrim <sup>1</sup> .....	47	67	350	81	74	140	950
Benzie .....	17	11	34	11	36	210	360
Grand Traverse ....	74	110	340	230	240	610	2,060
Leelanau .....	120	190	880	480	430	910	3,800
Manistee .....	3	4	67	1	4	110	300
<b>NORTHWEST</b> .....	<b>260</b>	<b>380</b>	<b>1,670</b>	<b>800</b>	<b>780</b>	<b>1,980</b>	<b>7,470</b>
Mason .....	2	22	170	29	60	130	500
Oceana .....	2	10	160	15	39	100	560
Others .....	7	4	29	16	8	32	140
<b>WEST CENTRAL</b> .....	<b>11</b>	<b>36</b>	<b>360</b>	<b>59</b>	<b>110</b>	<b>260</b>	<b>1,200</b>
Berrien .....	10	3	28	12	2	82	180
Van Buren .....	3	4	23	0	0	40	75
Others .....	0	7	7	3	4	24	53
<b>SOUTHWEST</b> .....	<b>16</b>	<b>17</b>	<b>58</b>	<b>15</b>	<b>6</b>	<b>146</b>	<b>310</b>
<b>EAST</b> .....	<b>0</b>	<b>0</b>	<b>18</b>	<b>7</b>	<b>11</b>	<b>10</b>	<b>73</b>
<b>STATE</b> .....	<b>280</b>	<b>430</b>	<b>2,100</b>	<b>880</b>	<b>900</b>	<b>2,400</b>	<b>9,050</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**Table 20.** SWEET CHERRY TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Antrim <sup>1</sup> .....	5,000	7,200	36,800	7,500	7,000	12,700	94,800
Benzie .....	1,600	1,100	3,800	1,000	2,800	12,700	27,700
Grand Traverse ....	6,700	10,100	33,700	21,200	21,000	54,100	192,000
Leelanau .....	13,000	17,100	85,800	43,300	38,400	66,900	346,000
Manistee .....	300	300	5,800	100	500	7,800	25,300
<b>NORTHWEST</b> .....	<b>26,600</b>	<b>35,800</b>	<b>166,000</b>	<b>73,100</b>	<b>69,700</b>	<b>154,000</b>	<b>686,000</b>
Mason .....	200	2,100	18,600	3,400	5,900	10,500	52,500
Oceana .....	500	900	18,100	1,700	3,500	9,200	58,300
Others .....	900	500	2,700	1,600	400	2,400	14,800
<b>WEST CENTRAL</b> .....	<b>1,500</b>	<b>3,500</b>	<b>39,500</b>	<b>6,600</b>	<b>9,800</b>	<b>22,100</b>	<b>125,000</b>
Berrien .....	1,200	300	2,900	1,300	200	7,400	17,900
Van Buren .....	400	300	2,100	0	0	3,000	6,300
Others .....	0	700	600	300	500	1,400	4,500
<b>SOUTHWEST</b> .....	<b>1,600</b>	<b>1,300</b>	<b>5,600</b>	<b>1,600</b>	<b>700</b>	<b>11,800</b>	<b>28,700</b>
<b>EAST</b> .....	<b>100</b>	<b>0</b>	<b>1,600</b>	<b>500</b>	<b>600</b>	<b>800</b>	<b>6,600</b>
<b>STATE</b> .....	<b>29,300</b>	<b>40,600</b>	<b>213,000</b>	<b>81,800</b>	<b>80,800</b>	<b>189,000</b>	<b>847,000</b>

<sup>1</sup>Includes Charlevoix, Cheboygan and Emmet.

**Table 21.****SWEET CHERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Emperor Francis ...	26	33	53	51	25	23	55	53
Gold .....	27	56	63	100	41	72	58	56
Napoleon .....	3	20	13	13	15	22	59	24
Ranier .....	7	8	7	20	6	11	13	2
Sam .....	2	8	12	8	21	7	10	18
Schmidt .....	3	5	3	5	2	3	21	9
Ulster .....	22	36	65	37	43	10	22	26
Hedelfingen .....	0	5	7	18	4	1	11	3
Van .....	0	0	7	7	19	0	7	0
Windsor .....	0	0	0	0	0	0	0	0
Other .....	5	12	13	7	7	5	12	8
Unknown .....	0	0	1	1	4	6	3	4
<b>NORTHWEST</b>	<b>95</b>	<b>180</b>	<b>250</b>	<b>270</b>	<b>180</b>	<b>160</b>	<b>270</b>	<b>200</b>
Emperor Francis ...	7	3	13	5	4	0	0	3
Gold .....	8	51	54	13	10	8	7	2
Napoleon .....	0	0	11	1	2	3	0	3
Ranier .....	1	2	17	0	0	0	0	0
Sam .....	0	3	3	2	5	1	1	12
Schmidt .....	0	0	0	0	0	2	0	0
Ulster .....	1	1	9	7	0	2	1	6
Hedelfingen .....	4	15	13	0	1	1	2	1
Van .....	3	1	12	1	0	0	0	0
Windsor .....	0	0	0	0	0	0	0	0
Other .....	4	10	6	1	1	2	0	0
Unknown .....	1	0	3	0	2	2	0	6
<b>WEST CENTRAL</b>	<b>29</b>	<b>85</b>	<b>140</b>	<b>31</b>	<b>25</b>	<b>21</b>	<b>13</b>	<b>33</b>

**Table 22.****SWEET CHERRY TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Emperor Francis ...	2,300	3,300	6,200	4,900	2,600	2,000	5,500	5,400
Gold .....	2,800	5,300	6,400	10,700	4,000	7,100	5,500	5,400
Napoleon .....	300	2,200	1,300	1,200	1,500	2,200	5,500	2,000
Ranier .....	700	900	700	1,900	500	1,000	1,200	200
Sam .....	200	800	1,400	800	2,200	700	800	1,800
Schmidt .....	300	300	300	400	200	200	2,100	800
Ulster .....	2,400	4,000	6,600	3,600	4,700	1,100	2,000	2,700
Hedelfingen .....	0	500	800	1,900	300	100	900	300
Van .....	0	0	800	700	1,800	0	700	0
Windsor .....	0	0	0	0	0	0	0	0
Other .....	400	1,300	1,400	500	700	500	1,000	800
Unknown .....	0	0	100	100	400	600	300	300
<b>NORTHWEST</b>	<b>9,400</b>	<b>18,600</b>	<b>26,000</b>	<b>26,700</b>	<b>18,900</b>	<b>15,500</b>	<b>25,500</b>	<b>19,700</b>
Emperor Francis ...	700	300	1,400	500	300	0	0	300
Gold .....	700	5,000	5,700	1,700	1,400	900	900	200
Napoleon .....	0	0	1,200	100	200	300	0	400
Ranier .....	100	200	1,800	0	0	0	0	0
Sam .....	100	300	400	200	400	0	100	2,600
Schmidt .....	0	0	0	0	0	100	0	100
Ulster .....	100	100	900	700	0	200	200	600
Hedelfingen .....	300	1,200	1,400	0	100	100	200	100
Van .....	300	100	2,600	100	0	0	0	0
Windsor .....	0	0	0	0	0	0	0	0
Other .....	300	1,300	700	300	100	300	0	0
Unknown .....	100	0	300	0	300	200	0	600
<b>WEST CENTRAL</b>	<b>2,700</b>	<b>8,500</b>	<b>16,400</b>	<b>3,600</b>	<b>2,800</b>	<b>2,100</b>	<b>1,400</b>	<b>4,900</b>

**Table 21.** SWEET CHERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Emperor Francis ...	46	53	360	180	190	230	1,380
Gold .....	66	170	480	130	130	230	1,680
Napoleon .....	29	59	350	250	180	600	1,640
Ranier .....	1	10	82	21	12	8	210
Sam .....	41	25	72	20	21	20	290
Schmidt .....	4	10	58	47	85	400	650
Ulster .....	9	5	22	4	4	3	310
Hedelfingen .....	16	12	100	69	47	160	450
Van .....	0	2	5	8	8	11	73
Windsor .....	0	0	8	12	25	180	220
Other .....	43	32	40	33	45	50	310
Unknown .....	8	2	89	23	37	83	260
<b>NORTHWEST</b>	<b>260</b>	<b>380</b>	<b>1,670</b>	<b>800</b>	<b>780</b>	<b>1,980</b>	<b>7,470</b>
Emperor Francis ...	1	0	32	0	12	20	100
Gold .....	2	14	160	23	12	53	420
Napoleon .....	0	12	49	8	27	70	180
Ranier .....	0	0	16	8	2	0	46
Sam .....	3	4	17	12	2	5	70
Schmidt .....	1	2	13	2	31	42	93
Ulster .....	0	0	1	0	0	0	28
Hedelfingen .....	4	4	17	6	7	3	78
Van .....	0	0	2	0	0	1	20
Windsor .....	0	0	4	1	3	44	52
Other .....	0	0	4	0	2	1	31
Unknown .....	1	0	46	0	7	20	87
<b>WEST CENTRAL</b>	<b>11</b>	<b>36</b>	<b>360</b>	<b>59</b>	<b>110</b>	<b>260</b>	<b>1,210</b>

**Table 22.** SWEET CHERRY TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Emperor Francis ...	4,700	5,000	35,800	19,000	16,100	17,300	130,000
Gold .....	7,200	16,400	48,300	11,900	11,800	19,000	162,000
Napoleon .....	3,100	4,800	33,800	22,400	15,900	47,500	144,000
Ranier .....	100	1,100	8,400	1,900	1,200	600	20,400
Sam .....	4,000	2,300	7,000	1,700	1,800	1,400	26,900
Schmidt .....	300	800	5,200	4,200	7,300	28,700	51,100
Ulster .....	900	600	2,300	400	300	300	31,900
Hedelfingen .....	1,700	1,200	9,300	5,700	4,300	12,800	39,800
Van .....	0	200	600	600	700	800	6,900
Windsor .....	0	0	800	900	2,300	14,700	18,700
Other .....	3,800	3,200	4,100	2,300	4,400	3,900	28,300
Unknown .....	800	200	9,900	2,100	3,600	7,000	25,400
<b>NORTHWEST</b>	<b>26,600</b>	<b>35,800</b>	<b>166,000</b>	<b>73,100</b>	<b>69,700</b>	<b>154,000</b>	<b>686,000</b>
Emperor Francis ...	100	0	3,500	0	1,100	1,300	9,500
Gold .....	300	1,400	17,900	2,700	1,200	4,200	44,200
Napoleon .....	0	1,000	5,400	900	2,700	6,600	18,800
Ranier .....	0	0	1,900	1,200	100	0	5,300
Sam .....	300	500	1,700	1,200	200	400	8,400
Schmidt .....	100	100	1,400	100	2,900	3,600	8,400
Ulster .....	0	0	100	0	0	100	3,000
Hedelfingen .....	500	500	2,000	500	600	300	7,800
Van .....	0	0	200	0	0	100	3,400
Windsor .....	0	0	300	0	200	3,600	4,100
Other .....	100	0	400	0	100	100	3,700
Unknown .....	100	0	4,700	0	700	1,800	8,800
<b>WEST CENTRAL</b>	<b>1,500</b>	<b>3,500</b>	<b>39,500</b>	<b>6,600</b>	<b>9,800</b>	<b>22,100</b>	<b>125,000</b>

**Table 21.****SWEET CHERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Emperor Francis ...	0	0	0	0	0	0	0	0
Gold .....	0	0	0	0	0	0	0	0
Napoleon .....	0	0	2	0	0	0	1	0
Ranier .....	0	0	1	2	0	0	1	0
Sam .....	0	0	1	3	0	3	7	1
Schmidt .....	0	0	0	1	1	0	7	1
Ulster .....	0	0	0	0	0	0	1	1
Hedelfingen .....	3	1	2	5	1	6	12	2
Van .....	0	0	0	0	1	0	0	0
Windsor .....	0	0	0	0	0	3	0	0
Other .....	1	0	1	0	1	3	4	2
Unknown .....	0	0	0	0	1	1	0	0
<b>SOUTHWEST AND EAST</b>	<b>6</b>	<b>1</b>	<b>7</b>	<b>11</b>	<b>5</b>	<b>15</b>	<b>32</b>	<b>7</b>
Emperor Francis ...	33	36	66	56	29	23	55	56
Gold .....	35	110	120	110	51	80	66	58
Napoleon .....	3	20	26	14	17	25	59	26
Ranier .....	7	10	25	22	6	11	14	2
Sam .....	3	10	16	12	26	10	19	32
Schmidt .....	3	5	3	6	3	5	29	10
Ulster .....	24	37	74	44	44	12	24	32
Hedelfingen .....	7	20	21	23	5	8	25	7
Van .....	3	1	19	8	19	0	7	0
Windsor .....	0	0	0	0	0	3	0	0
Other .....	10	23	21	9	9	9	15	10
Unknown .....	1	0	4	1	6	10	4	9
<b>STATE</b>	<b>130</b>	<b>260</b>	<b>400</b>	<b>310</b>	<b>210</b>	<b>200</b>	<b>310</b>	<b>240</b>

**Table 22.****SWEET CHERRY TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Emperor Francis ...	50	0	0	0	0	0	0	0
Gold .....	0	0	0	0	0	0	0	0
Napoleon .....	0	0	300	0	0	0	50	0
Ranier .....	50	0	100	200	0	0	50	0
Sam .....	0	0	0	300	0	200	700	200
Schmidt .....	0	0	0	200	50	0	700	100
Ulster .....	100	0	0	0	50	0	100	100
Hedelfingen .....	300	100	200	500	100	400	1,700	300
Van .....	0	0	0	0	100	0	0	0
Windsor .....	0	0	0	0	0	100	0	0
Other .....	200	0	100	0	200	200	600	200
Unknown .....	0	0	0	0	100	100	0	0
<b>SOUTHWEST AND EAST</b>	<b>700</b>	<b>100</b>	<b>700</b>	<b>1,200</b>	<b>600</b>	<b>1,000</b>	<b>4,100</b>	<b>900</b>
Emperor Francis ...	3,000	3,600	7,600	5,400	2,900	2,000	5,500	5,700
Gold .....	3,500	10,300	12,100	12,400	5,400	8,000	6,400	5,600
Napoleon .....	300	2,200	2,800	1,300	1,700	2,500	5,600	2,400
Ranier .....	900	1,100	2,600	2,100	500	1,000	1,300	200
Sam .....	300	1,100	1,800	1,300	2,600	900	1,600	4,600
Schmidt .....	300	300	300	600	200	300	2,800	1,000
Ulster .....	2,600	4,100	7,500	4,300	4,800	1,300	2,300	3,400
Hedelfingen .....	600	1,800	2,400	2,400	500	600	2,800	700
Van .....	300	100	3,400	800	1,900	0	700	0
Windsor .....	0	0	0	0	0	100	0	0
Other .....	900	2,600	2,200	800	1,000	1,000	1,600	1,000
Unknown .....	100	0	400	100	800	900	300	900
<b>STATE</b>	<b>12,800</b>	<b>27,200</b>	<b>43,100</b>	<b>31,500</b>	<b>22,300</b>	<b>18,600</b>	<b>31,000</b>	<b>25,500</b>

**Table 21.** SWEET CHERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Emperor Francis ...	0	0	0	1	3	1	5
Gold .....	0	0	7	0	0	1	8
Napoleon .....	0	4	7	3	0	3	19
Ranier .....	0	0	1	0	0	0	5
Sam .....	3	1	5	2	0	0	26
Schmidt .....	0	1	11	1	4	32	57
Ulster .....	2	0	2	0	0	0	6
Hedelfingen .....	4	3	28	7	10	75	160
Van .....	2	2	4	1	0	21	31
Windsor .....	2	1	1	2	0	11	20
Other .....	1	2	9	1	0	3	28
Unknown .....	0	2	3	5	0	8	21
<b>SOUTHWEST AND EAST</b> .....	<b>14</b>	<b>15</b>	<b>76</b>	<b>22</b>	<b>17</b>	<b>150</b>	<b>380</b>
Emperor Francis ...	46	53	390	180	210	250	1,480
Gold .....	68	180	650	150	140	280	2,100
Napoleon .....	29	75	410	260	210	670	1,840
Ranier .....	1	10	99	29	14	8	260
Sam .....	46	30	95	34	23	25	380
Schmidt .....	5	12	81	49	120	470	800
Ulster .....	11	6	24	4	4	4	340
Hedelfingen .....	23	19	140	81	64	240	680
Van .....	2	5	11	9	8	32	120
Windsor .....	2	1	12	14	28	240	300
Other .....	45	34	53	34	47	54	370
Unknown .....	9	5	140	28	44	111	370
<b>STATE</b> .....	<b>280</b>	<b>430</b>	<b>2,100</b>	<b>880</b>	<b>900</b>	<b>2,400</b>	<b>9,050</b>

**Table 22.** SWEET CHERRY TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Emperor Francis ...	0	0	0	50	400	100	600
Gold .....	0	0	800	0	0	100	900
Napoleon .....	0	500	600	200	0	300	2,000
Ranier .....	0	0	0	0	0	0	400
Sam .....	200	100	700	200	0	0	2,600
Schmidt .....	0	50	800	50	300	2,300	4,600
Ulster .....	300	0	200	0	0	0	800
Hedelfingen .....	400	250	2,400	900	600	5,000	13,200
Van .....	300	200	300	0	0	3,400	4,300
Windsor .....	300	0	100	200	0	800	1,500
Other .....	200	100	900	100	0	300	3,100
Unknown .....	0	100	400	400	0	300	1,400
<b>SOUTHWEST AND EAST</b> .....	<b>1,700</b>	<b>1,300</b>	<b>7,200</b>	<b>2,100</b>	<b>1,300</b>	<b>12,600</b>	<b>35,300</b>
Emperor Francis ...	4,800	5,000	39,300	19,000	17,600	18,700	140,000
Gold .....	7,500	17,800	67,000	14,600	13,000	23,300	207,000
Napoleon .....	3,100	6,300	39,800	23,500	18,600	54,400	165,000
Ranier .....	100	1,100	10,300	3,100	1,300	600	26,200
Sam .....	4,500	2,900	9,400	3,100	2,000	1,800	37,900
Schmidt .....	400	1,000	7,400	4,400	10,500	34,600	64,100
Ulster .....	1,200	600	2,600	400	300	400	35,800
Hedelfingen .....	2,600	1,900	13,700	7,100	5,500	18,100	60,700
Van .....	300	400	1,100	600	700	4,300	14,600
Windsor .....	300	0	1,200	1,100	2,500	19,100	24,300
Other .....	4,100	3,300	5,400	2,400	4,500	4,300	35,100
Unknown .....	900	300	15,000	2,500	4,300	9,100	35,600
<b>STATE</b> .....	<b>29,800</b>	<b>40,600</b>	<b>213,000</b>	<b>81,800</b>	<b>80,800</b>	<b>189,000</b>	<b>847,000</b>

**Table 23.****SWEET CHERRY ACRES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT**

ROOTSTOCK AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Mahaleb .....	50	24	46	46	55	52	92	63
Mazzard .....	35	100	110	130	100	67	96	63
Other .....	0	0	0	3	0	0	0	0
Unknown .....	10	54	93	87	27	42	83	77
<b>NORTHWEST</b>	<b>95</b>	<b>180</b>	<b>250</b>	<b>270</b>	<b>180</b>	<b>160</b>	<b>270</b>	<b>200</b>
Mahaleb .....	7	45	12	2	17	8	8	19
Mazzard .....	8	20	120	22	3	5	1	7
Other .....	0	0	4	0	0	0	0	1
Unknown .....	14	19	4	8	5	8	4	7
<b>WEST CENTRAL</b>	<b>29</b>	<b>85</b>	<b>140</b>	<b>31</b>	<b>25</b>	<b>21</b>	<b>13</b>	<b>33</b>
Mahaleb .....	2	1	1	8	1	2	3	5
Mazzard .....	1	0	6	2	2	6	17	2
Other .....	0	0	0	0	0	0	0	0
Unknown .....	3	0	0	1	2	7	12	0
<b>SOUTHWEST AND EAST</b>	<b>6</b>	<b>1</b>	<b>7</b>	<b>11</b>	<b>5</b>	<b>15</b>	<b>32</b>	<b>7</b>
Mahaleb .....	59	70	59	56	72	62	100	86
Mazzard .....	44	120	240	150	100	77	110	72
Other .....	0	1	4	3	0	0	0	1
Unknown .....	27	73	97	96	35	57	99	84
<b>STATE</b>	<b>130</b>	<b>260</b>	<b>400</b>	<b>310</b>	<b>210</b>	<b>200</b>	<b>310</b>	<b>240</b>

**Table 24.****SWEET CHERRY TREES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT**

ROOTSTOCK AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Mahaleb .....	4,900	2,700	4,800	4,400	5,800	5,100	7,900	6,700
Mazzard .....	3,500	10,100	10,700	13,600	10,400	6,400	9,400	5,600
Other .....	0	0	0	200	0	0	0	0
Unknown .....	1,000	5,800	10,500	8,500	2,700	4,000	8,200	7,400
<b>NORTHWEST</b>	<b>9,400</b>	<b>18,600</b>	<b>26,000</b>	<b>26,700</b>	<b>18,900</b>	<b>15,500</b>	<b>25,500</b>	<b>19,700</b>
Mahaleb .....	700	3,800	1,300	200	1,600	800	900	3,300
Mazzard .....	700	2,500	14,200	2,200	300	500	100	700
Other .....	0	100	400	0	0	0	0	100
Unknown .....	1,300	2,100	500	1,200	900	800	400	800
<b>WEST CENTRAL</b>	<b>2,700</b>	<b>8,500</b>	<b>16,400</b>	<b>3,600</b>	<b>2,800</b>	<b>2,100</b>	<b>1,400</b>	<b>4,900</b>
Mahaleb .....	300	100	0	1,000	300	100	600	600
Mazzard .....	100	0	600	200	200	500	2,100	200
Other .....	100	0	100	0	0	0	0	0
Unknown .....	200	0	0	0	100	400	1,400	100
<b>SOUTHWEST AND EAST</b>	<b>700</b>	<b>100</b>	<b>700</b>	<b>1,200</b>	<b>600</b>	<b>1,000</b>	<b>4,100</b>	<b>900</b>
Mahaleb .....	5,900	6,600	6,100	5,600	7,700	6,000	9,400	10,600
Mazzard .....	4,300	12,600	25,500	16,000	10,900	7,400	11,600	6,500
Other .....	100	100	500	200	0	0	0	100
Unknown .....	2,500	7,900	11,000	9,700	3,700	5,200	10,000	8,300
<b>STATE</b>	<b>12,800</b>	<b>27,200</b>	<b>43,100</b>	<b>31,500</b>	<b>22,300</b>	<b>18,600</b>	<b>31,000</b>	<b>25,500</b>

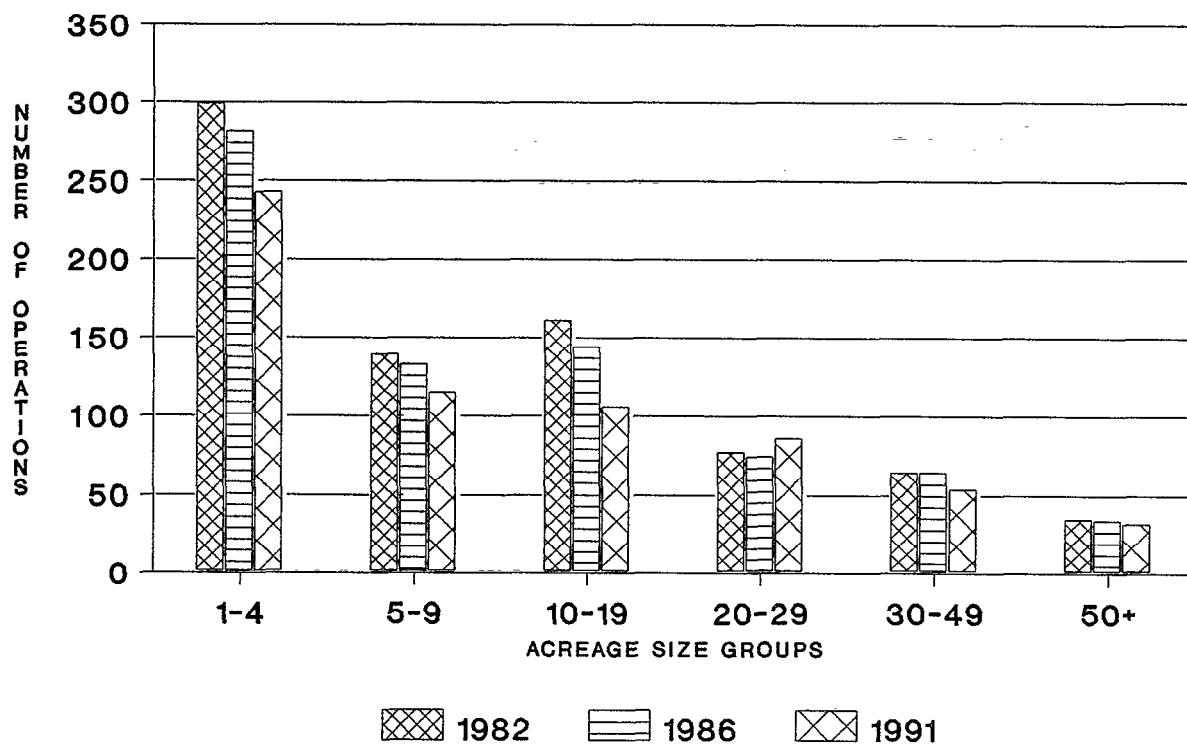
**Table 23.** SWEET CHERRY ACRES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT—Continued

ROOTSTOCK AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Mahaleb .....	40	52	300	120	120	480	1,540
Mazzard .....	120	150	550	290	290	490	2,590
Other .....	0	0	11	0	0	0	15
Unknown .....	100	180	810	390	370	1,010	3,330
<b>NORTHWEST</b> .....	<b>260</b>	<b>380</b>	<b>1,670</b>	<b>800</b>	<b>780</b>	<b>1,980</b>	<b>7,470</b>
Mahaleb .....	0	13	100	27	70	62	390
Mazzard .....	8	10	120	11	3	38	380
Other .....	0	0	0	0	0	0	5
Unknown .....	3	13	140	21	33	160	440
<b>WEST CENTRAL</b> .....	<b>11</b>	<b>36</b>	<b>360</b>	<b>59</b>	<b>110</b>	<b>260</b>	<b>1,200</b>
Mahaleb .....	2	6	21	5	3	40	100
Mazzard .....	2	6	22	8	5	60	140
Other .....	0	0	0	0	0	0	0
Unknown .....	12	5	33	9	9	56	150
<b>SOUTHWEST AND EAST</b> .....	<b>16</b>	<b>17</b>	<b>76</b>	<b>22</b>	<b>17</b>	<b>160</b>	<b>390</b>
Mahaleb .....	42	71	420	150	190	580	2,020
Mazzard .....	130	170	690	310	300	590	3,100
Other .....	0	0	11	0	0	0	20
Unknown .....	110	200	980	420	410	1,226	3,920
<b>STATE</b> .....	<b>280</b>	<b>430</b>	<b>2,100</b>	<b>880</b>	<b>900</b>	<b>2,400</b>	<b>9,050</b>

**Table 24.** SWEET CHERRY TREES BY YEAR PLANTED, ROOTSTOCK AND DISTRICT—Continued

ROOTSTOCK AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Mahaleb .....	4,300	5,200	30,800	11,200	12,100	36,000	142,000
Mazzard .....	11,300	13,200	49,900	23,300	25,000	38,200	231,000
Other .....	0	0	1,100	0	0	0	1,300
Unknown .....	11,000	17,400	84,300	38,600	32,600	79,800	312,000
<b>NORTHWEST</b> .....	<b>26,600</b>	<b>35,800</b>	<b>166,000</b>	<b>73,100</b>	<b>69,700</b>	<b>154,000</b>	<b>686,000</b>
Mahaleb .....	0	1,400	12,000	3,100	6,300	5,800	41,200
Mazzard .....	800	900	12,300	1,100	400	3,200	39,900
Other .....	0	0	0	0	0	0	600
Unknown .....	700	1,200	15,200	2,400	3,100	13,100	43,700
<b>WEST CENTRAL</b> .....	<b>1,500</b>	<b>3,500</b>	<b>39,500</b>	<b>6,600</b>	<b>9,800</b>	<b>22,100</b>	<b>125,000</b>
Mahaleb .....	100	600	2,300	500	400	3,200	10,100
Mazzard .....	100	400	2,000	1,000	400	5,400	13,200
Other .....	0	0	0	0	0	0	200
Unknown .....	1,500	300	2,900	600	500	4,000	12,000
<b>SOUTHWEST AND EAST</b> .....	<b>1,700</b>	<b>1,300</b>	<b>7,200</b>	<b>2,100</b>	<b>1,300</b>	<b>12,600</b>	<b>35,500</b>
Mahaleb .....	4,400	7,200	45,100	14,800	18,800	45,000	193,000
Mazzard .....	12,200	14,500	64,200	25,400	25,800	46,800	284,000
Other .....	0	0	1,100	0	0	0	2,100
Unknown .....	13,200	18,900	103,000	41,600	36,200	96,900	368,000
<b>STATE</b> .....	<b>29,800</b>	<b>40,600</b>	<b>213,000</b>	<b>81,800</b>	<b>80,800</b>	<b>189,000</b>	<b>847,000</b>

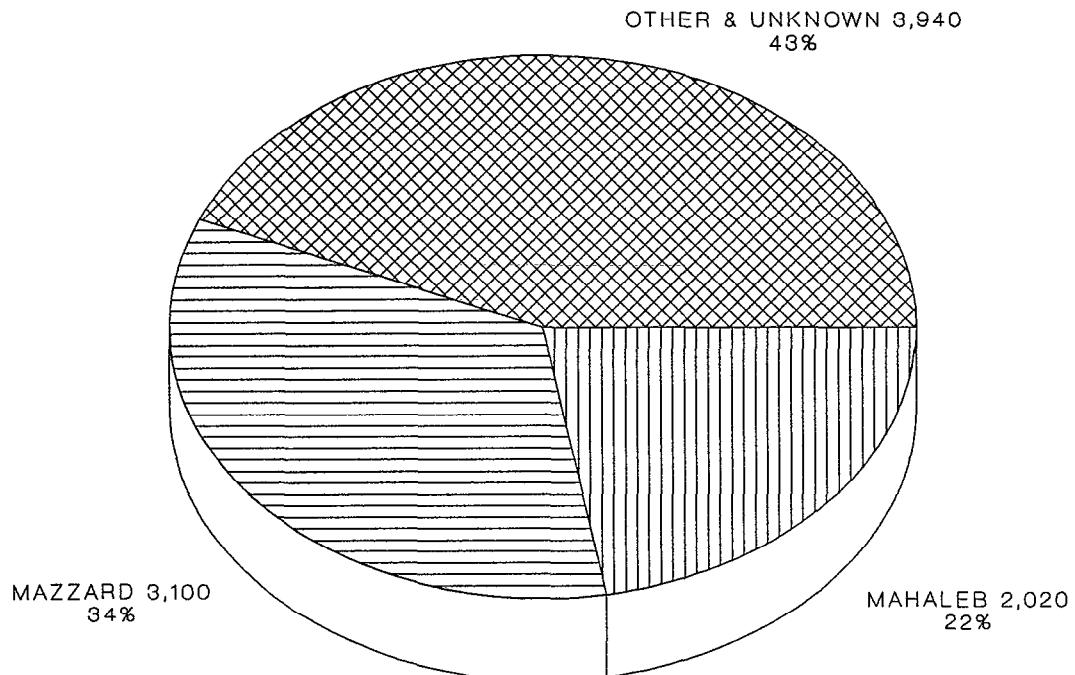
## MICHIGAN SWEET CHERRIES OPERATIONS BY ACREAGE SIZE GROUP



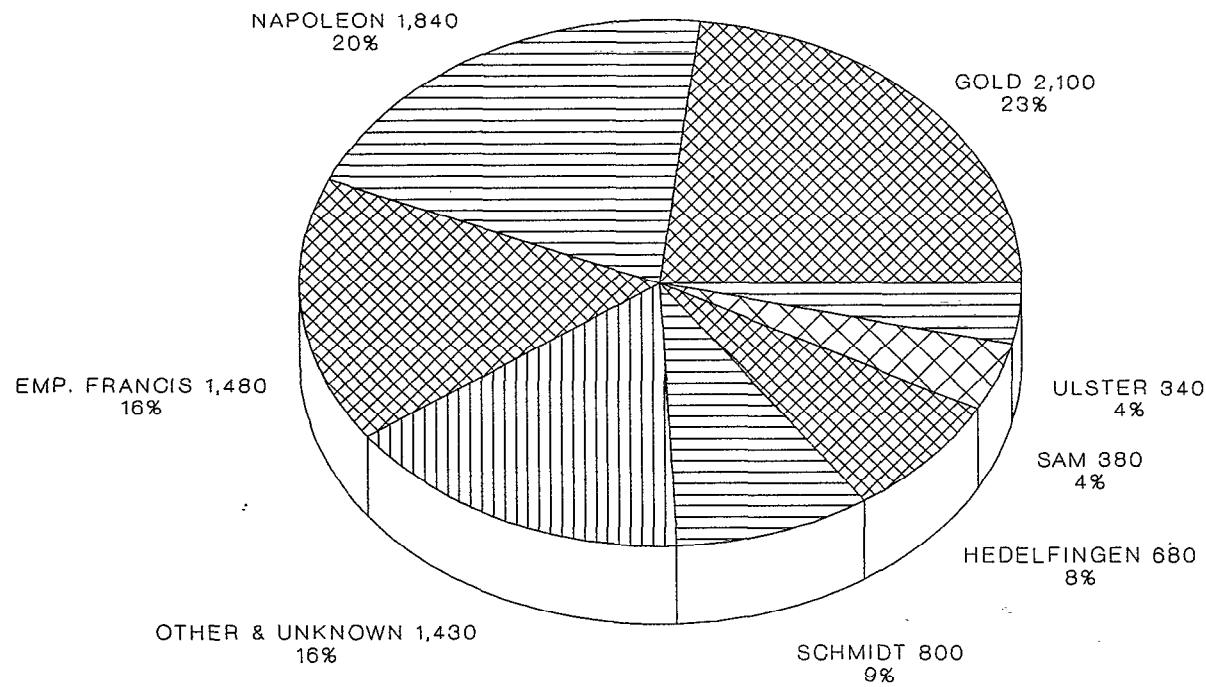
**Table 25.** SWEET CHERRY OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups								TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	200+	
1991 Operations .....	243	115	106	86	54	26	5	1	636
Acres .....	370	750	1,400	2,040	1,920	1,690	670	210	9,050
1986 Operations .....	282	133	144	74	64	26	5	3	731
Acres .....	440	850	1,830	1,680	2,350	1,760	630	1,160	10,700
1982 Operations .....	299	139	161	77	64	29	4	2	775
Acres .....	526	886	2,100	1,790	2,345	1,871	498	680	10,696

## SWEET CHERRY ROOTSTOCKS ACRES & PERCENTS



## SWEET CHERRY VARIETIES ACRES AND PERCENTS



# BLUEBERRIES

The acres in blueberries has nearly doubled in the past 20 years. Since 1986 land in this crop climbed 16 percent, the largest percentage gain of any major fruit. Using plant spacing, the number of bushes were estimated for the first time. There was a State average 960 bushes per acre. Recent plantings have averaged nearly 1,100 bushes per acre.

The five most common varieties of blueberries were, in order, Jersey, Blucrop, Rubel, Elliot and Blueray. These accounted for 88 percent of the 16,400 acres. The crop is very regional. About 95 percent is located along the Lake

**Table 26. OTHER BLUEBERRY VARIETIES**

VARIETY	Acres
Collins .....	46
Coville .....	38
Duke .....	61
Earliblue .....	75
Pemberton .....	41
Spartan .....	92
Stanley .....	32
Weymouth .....	38
All Others .....	77
<b>TOTAL</b>	<b>500</b>

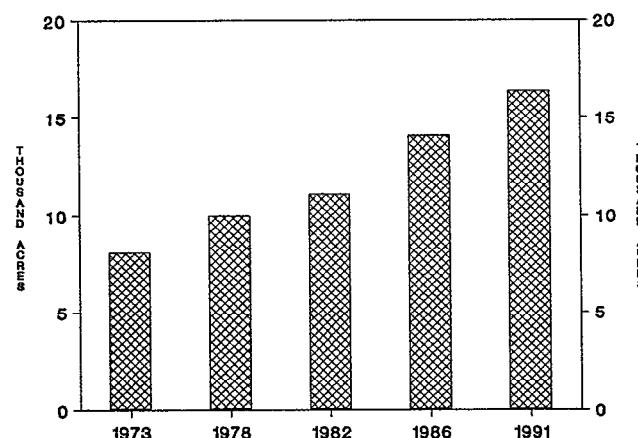
**Table 27. BLUEBERRY ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Muskegon .....	1	12	0	38	10	36	84	19
Newaygo .....	1	0	0	0	0	0	10	0
Ottawa .....	110	140	89	140	85	200	150	220
Others .....	0	13	0	18	0	1	0	2
<b>WEST CENTRAL</b>	<b>110</b>	<b>170</b>	<b>89</b>	<b>200</b>	<b>95</b>	<b>240</b>	<b>240</b>	<b>240</b>
Allegan .....	13	17	86	43	35	47	75	42
Berrien .....	14	7	1	4	10	8	37	6
Van Buren .....	110	100	150	100	220	230	235	170
Others .....	0	0	0	0	0	0	0	0
<b>SOUTHWEST</b>	<b>140</b>	<b>120</b>	<b>240</b>	<b>150</b>	<b>260</b>	<b>280</b>	<b>350</b>	<b>220</b>
Genesee .....	0	5	0	5	0	0	0	1
Saginaw .....	0	0	0	0	0	0	12	0
Others .....	6	8	8	11	7	10	30	20
<b>NORTHWEST AND EAST</b>	<b>6</b>	<b>13</b>	<b>8</b>	<b>16</b>	<b>7</b>	<b>10</b>	<b>42</b>	<b>21</b>
<b>STATE</b>	<b>260</b>	<b>300</b>	<b>340</b>	<b>370</b>	<b>360</b>	<b>530</b>	<b>630</b>	<b>480</b>

**Table 28. BLUEBERRY BUSHES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Muskegon .....	1,000	13,100	0	37,500	10,800	27,500	76,000	19,100
Newaygo .....	1,000	0	0	0	0	0	9,100	0
Ottawa .....	112,000	152,000	94,700	140,000	89,400	194,000	173,000	203,000
Others .....	0	11,200	0	13,300	0	500	0	1,500
<b>WEST CENTRAL</b>	<b>114,000</b>	<b>176,000</b>	<b>94,700</b>	<b>191,000</b>	<b>100,000</b>	<b>222,000</b>	<b>258,000</b>	<b>224,000</b>
Allegan .....	16,400	18,400	87,800	40,300	36,300	43,400	75,100	41,200
Berrien .....	17,900	6,400	1,100	4,500	9,500	7,700	39,400	5,900
Van Buren .....	119,000	110,000	157,000	106,000	237,000	223,000	251,000	172,000
Others .....	0	0	0	0	0	0	0	0
<b>SOUTHWEST</b>	<b>153,000</b>	<b>135,000</b>	<b>246,000</b>	<b>151,000</b>	<b>283,000</b>	<b>274,000</b>	<b>366,000</b>	<b>219,000</b>
Genesee .....	0	4,400	0	4,400	0	0	0	1,000
Saginaw .....	0	0	0	0	0	0	11,400	0
Others .....	5,000	7,000	6,300	11,800	6,300	11,600	24,400	13,100
<b>NORTHWEST AND EAST</b>	<b>5,000</b>	<b>11,400</b>	<b>6,300</b>	<b>16,200</b>	<b>6,300</b>	<b>11,600</b>	<b>35,800</b>	<b>14,100</b>
<b>STATE</b>	<b>272,000</b>	<b>322,000</b>	<b>347,000</b>	<b>358,000</b>	<b>389,000</b>	<b>508,000</b>	<b>660,000</b>	<b>457,000</b>

## BLUEBERRY ACRES

**Table 27.** BLUEBERRY ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

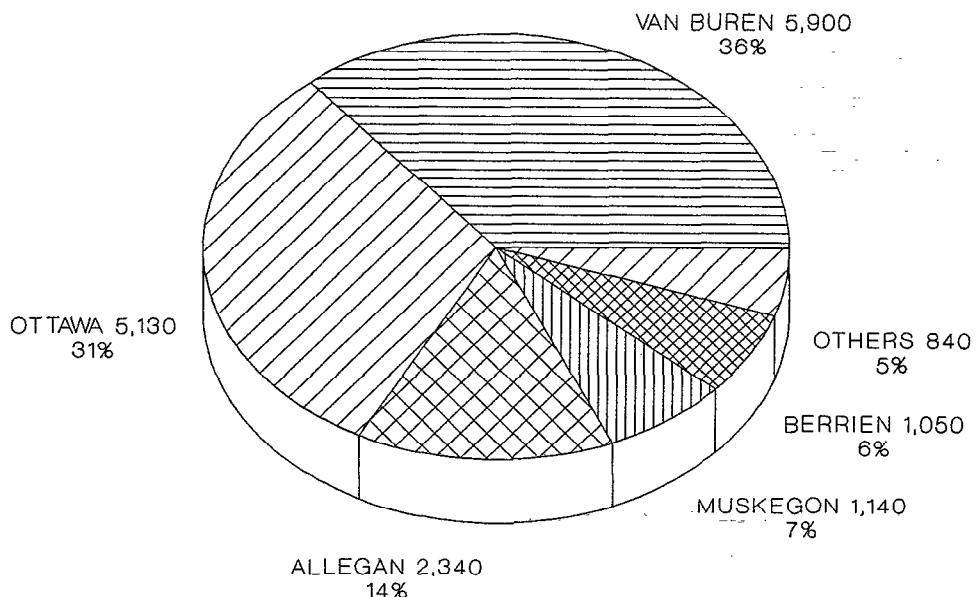
COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Muskegon .....	0	54	48	94	130	610	1,140
Newaygo .....	0	4	5	15	0	68	100
Ottawa .....	190	78	750	440	400	2,140	5,130
Others .....	4	8	8	0	0	94	150
<b>WEST CENTRAL</b>	<b>190</b>	<b>140</b>	<b>810</b>	<b>550</b>	<b>530</b>	<b>2,910</b>	<b>6,520</b>
Allegan .....	76	89	220	160	210	1,230	2,340
Berrien .....	22	16	58	120	91	660	1,050
Van Buren .....	170	190	640	580	490	2,510	5,900
Others .....	0	0	12	0	0	33	45
<b>SOUTHWEST</b>	<b>270</b>	<b>300</b>	<b>930</b>	<b>860</b>	<b>790</b>	<b>4,430</b>	<b>9,340</b>
Genesee .....	0	1	0	0	5	45	62
Saginaw .....	0	0	2	0	6	94	110
Others .....	7	10	50	46	52	64	330
<b>NORTHWEST AND EAST</b>	<b>7</b>	<b>11</b>	<b>52</b>	<b>46</b>	<b>63</b>	<b>200</b>	<b>500</b>
<b>STATE</b>	<b>470</b>	<b>450</b>	<b>1,790</b>	<b>1,460</b>	<b>1,380</b>	<b>7,540</b>	<b>16,400</b>

**Table 28.** BLUEBERRY BUSHES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Muskegon .....	300	49,700	50,100	88,300	153,000	544,000	1,070,000
Newaygo .....	0	2,400	3,000	14,500	0	47,100	77,100
Ottawa .....	204,000	87,900	716,000	448,000	358,000	1,960,000	4,930,000
Others .....	3,400	7,200	10,000	0	0	80,000	127,000
<b>WEST CENTRAL</b>	<b>208,000</b>	<b>147,000</b>	<b>779,000</b>	<b>551,000</b>	<b>511,000</b>	<b>2,630,000</b>	<b>6,200,000</b>
Allegan .....	85,000	105,000	241,000	165,000	228,000	1,120,000	2,302,900
Berrien .....	18,500	16,400	53,100	106,000	83,900	702,000	1,070,000
Van Buren .....	177,000	195,000	631,000	544,000	477,000	2,240,000	5,639,000
Others .....	0	0	10,300	0	0	29,600	39,900
<b>SOUTHWEST</b>	<b>280,000</b>	<b>316,000</b>	<b>935,000</b>	<b>815,000</b>	<b>789,000</b>	<b>4,090,000</b>	<b>9,050,000</b>
Genesee .....	0	900	0	0	4,400	44,600	59,700
Saginaw .....	0	0	1,700	0	6,300	85,400	105,000
Others .....	7,200	5,600	39,700	29,400	50,000	50,100	267,000
<b>NORTHWEST AND EAST</b>	<b>7,200</b>	<b>6,500</b>	<b>41,400</b>	<b>29,400</b>	<b>60,700</b>	<b>180,000</b>	<b>432,000</b>
<b>STATE</b>	<b>495,000</b>	<b>470,000</b>	<b>1,760,000</b>	<b>1,400,000</b>	<b>1,360,000</b>	<b>6,900,000</b>	<b>15,700,000</b>

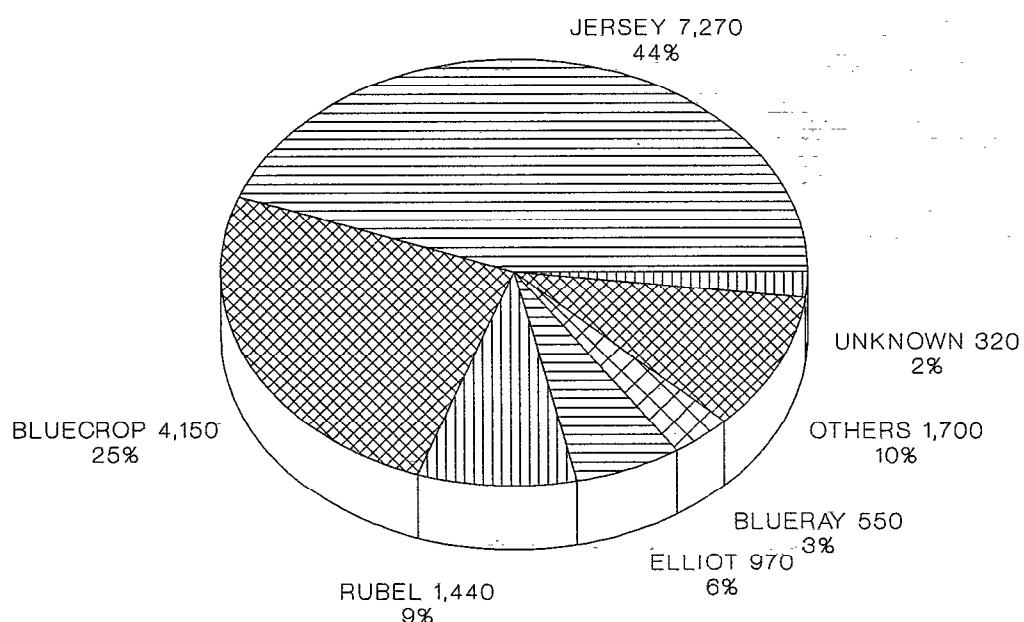
**Table 29.****BLUEBERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Berkeley .....	0	0	0	0	0	0	3	0
Bluecrop .....	0	2	0	3	1	1	19	7
Bluejay .....	0	0	0	0	0	0	0	1
Blueray .....	3	4	3	1	5	1	14	10
Bluetta .....	0	0	0	0	1	0	1	0
Burlington .....	0	0	0	0	0	0	0	0
Elliot .....	1	2	0	0	0	0	0	0
Jersey .....	0	0	1	2	0	0	0	2
Northland .....	0	0	1	0	0	0	0	0
Patriot .....	2	4	0	6	0	2	2	0
Rancross .....	0	0	0	0	0	0	0	0
Rubel .....	0	0	0	0	0	0	0	0
Other .....	0	1	3	4	0	1	1	0
Unknown .....	0	0	0	0	0	5	2	1
<b>NORTHWEST AND EAST</b> .....	<b>6</b>	<b>13</b>	<b>8</b>	<b>16</b>	<b>7</b>	<b>10</b>	<b>42</b>	<b>21</b>
Berkeley .....	0	0	0	0	0	0	0	0
Bluecrop .....	37	82	45	130	52	120	120	140
Bluejay .....	7	0	4	0	2	5	1	8
Blueray .....	1	0	5	1	0	10	8	8
Bluetta .....	0	0	0	0	2	0	5	8
Burlington .....	0	0	0	0	0	0	3	0
Elliot .....	50	46	22	38	30	86	81	35
Jersey .....	0	30	12	11	5	11	21	12
Northland .....	0	0	0	0	0	0	0	18
Patriot .....	0	0	0	7	0	0	0	0
Rancross .....	0	0	0	0	0	0	0	0
Rubel .....	6	6	0	14	0	1	0	5
Other .....	7	2	1	1	5	0	2	0
Unknown .....	0	0	0	0	0	6	0	6
<b>WEST CENTRAL</b> .....	<b>110</b>	<b>170</b>	<b>89</b>	<b>200</b>	<b>95</b>	<b>240</b>	<b>240</b>	<b>240</b>

**TOP BLUEBERRY COUNTIES  
ACRES AND PERCENTS**

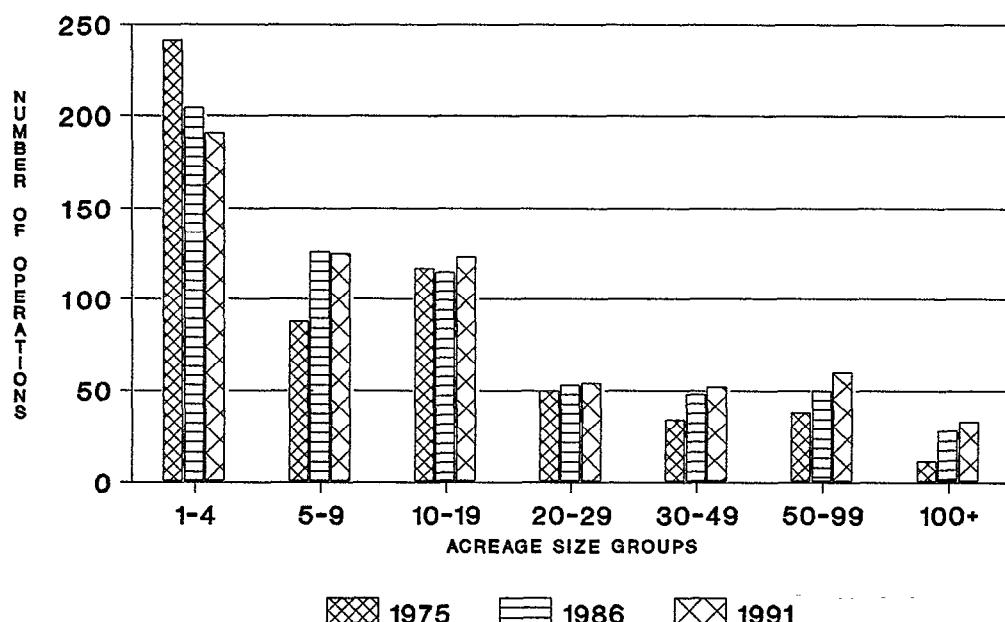
**Table 29.****BLUEBERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Berkeley .....	0	0	0	1	1	10	15
Bluecrop .....	3	9	2	5	12	20	84
Bluejay .....	0	0	0	0	0	9	10
Blueray .....	1	1	10	10	15	29	110
Bluetta .....	0	0	1	1	0	0	4
Burlington .....	0	0	0	0	0	0	0
Elliot .....	0	0	0	0	0	0	3
Jersey .....	0	1	13	16	30	84	150
Northland .....	0	0	0	9	0	4	14
Patriot .....	1	0	18	0	0	1	36
Rancross .....	0	0	0	0	0	1	1
Rubel .....	0	0	0	1	0	2	3
Other .....	0	0	7	0	5	18	40
Unknown .....	2	0	1	3	0	26	40
<b>NORTHWEST AND EAST</b>	<b>7</b>	<b>11</b>	<b>52</b>	<b>46</b>	<b>63</b>	<b>200</b>	<b>500</b>
Berkeley .....	0	0	13	26	0	22	61
Bluecrop .....	53	88	340	230	250	390	2,080
Bluejay .....	12	4	16	3	1	5	66
Blueray .....	2	9	21	47	60	110	280
Bluetta .....	0	2	17	14	14	18	80
Burlington .....	5	0	11	24	0	14	56
Elliot .....	81	16	84	17	5	20	610
Jersey .....	34	10	250	150	120	1,720	2,390
Northland .....	0	0	0	0	0	0	18
Patriot .....	4	0	11	0	0	8	30
Rancross .....	0	0	0	2	0	3	5
Rubel .....	0	0	17	7	48	390	490
Other .....	2	9	19	5	18	100	170
Unknown .....	2	7	11	22	14	110	180
<b>WEST CENTRAL</b>	<b>190</b>	<b>140</b>	<b>810</b>	<b>550</b>	<b>530</b>	<b>2,910</b>	<b>6,520</b>

**BLUEBERRY VARIETIES  
ACRES AND PERCENTS**

**Table 29.****BLUEBERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Berkeley .....	0	0	0	2	0	1	0	0
Bluecrop .....	18	36	72	30	100	56	130	73
Bluejay .....	7	13	23	6	21	12	15	0
Blueray .....	5	2	6	1	4	1	11	2
Bluetta .....	2	0	0	5	6	0	13	1
Burlington .....	0	1	0	11	1	0	0	1
Elliot .....	27	28	28	30	10	30	50	4
Jersey .....	20	21	31	35	90	150	86	110
Northland .....	0	0	28	4	0	0	2	0
Patriot .....	3	1	14	5	7	22	6	6
Rancross .....	0	0	2	3	5	0	8	0
Rubel .....	26	14	11	0	14	2	16	3
Other .....	28	8	26	13	4	2	2	2
Unknown .....	0	2	0	1	0	1	7	17
<b>SOUTHWEST</b>	<b>140</b>	<b>120</b>	<b>240</b>	<b>150</b>	<b>260</b>	<b>280</b>	<b>350</b>	<b>220</b>
Berkeley .....	0	0	0	2	0	1	3	0
Bluecrop .....	55	120	120	160	150	180	270	220
Bluejay .....	14	13	27	6	23	17	16	9
Blueray .....	9	6	14	3	9	12	33	20
Bluetta .....	2	0	0	5	9	0	19	9
Burlington .....	0	1	0	11	1	0	3	1
Elliot .....	78	76	50	68	40	120	130	39
Jersey .....	20	51	44	48	95	160	110	120
Northland .....	0	0	29	4	0	0	2	18
Patriot .....	5	5	14	18	7	24	8	6
Rancross .....	0	0	2	3	5	0	8	0
Rubel .....	32	20	11	14	14	3	16	8
Other .....	35	11	30	18	9	3	5	2
Unknown .....	0	2	0	1	0	12	9	24
<b>STATE</b>	<b>260</b>	<b>300</b>	<b>340</b>	<b>370</b>	<b>360</b>	<b>530</b>	<b>630</b>	<b>480</b>

**MICHIGAN BLUEBERRIES  
OPERATIONS BY ACREAGE SIZE GROUP**

**Table 29.** BLUEBERRY ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Berkeley .....	0	1	5	33	31	60	130
Bluecrop .....	76	110	250	300	260	470	1,980
Bluejay .....	16	4	16	11	0	27	170
Blueray .....	1	2	4	36	16	70	160
Bluetta .....	1	7	15	8	7	38	100
Burlington .....	2	0	19	0	0	17	52
Elliot .....	32	29	49	9	0	35	360
Jersey .....	120	85	500	400	340	2,760	4,750
Northland .....	5	16	1	0	0	17	73
Patriot .....	0	0	3	1	0	17	85
Rancross .....	0	8	0	12	10	83	130
Rubel .....	9	34	49	23	76	670	950
Other .....	10	3	21	20	31	120	290
Unknown .....	4	1	2	6	20	42	100
<b>SOUTHWEST</b>	<b>270</b>	<b>300</b>	<b>930</b>	<b>860</b>	<b>790</b>	<b>4,430</b>	<b>9,340</b>
Berkeley .....	0	1	18	60	32	92	210
Bluecrop .....	130	210	590	540	520	880	4,150
Bluejay .....	28	8	32	14	1	41	250
Blueray .....	4	12	35	93	91	210	550
Bluetta .....	1	9	33	23	21	56	190
Burlington .....	7	0	30	24	0	31	110
Elliot .....	110	45	130	26	5	55	970
Jersey .....	150	96	760	570	490	4,560	7,270
Northland .....	5	16	1	9	0	21	110
Patriot .....	5	0	32	1	0	26	150
Rancross .....	0	8	0	14	10	87	140
Rubel .....	9	34	66	31	120	1,060	1,440
Other .....	12	12	47	25	54	240	500
Unknown .....	8	8	14	31	34	180	320
<b>STATE</b>	<b>470</b>	<b>450</b>	<b>1,790</b>	<b>1,460</b>	<b>1,380</b>	<b>7,540</b>	<b>16,400</b>

**Table 30.** BLUEBERRY OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups								TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	200+	
1991 Operations ....	191	125	123	54	52	60	25	8	638
Acres .....	380	820	1,630	1,240	1,990	4,230	3,350	2,760	16,400
1986 Operations ....	204	126	115	53	48	50	23	5	624
Acres .....	450	810	1,500	1,180	1,790	3,460	3,090	1,820	14,100
1975 Operations ....	241	88	117	50	34	38	9	3	580
Acres .....	529	586	1,547	1,173	1,258	2,645	1,194	768	9,700

# GRAPES

Acres of grapes rebounded by 3 percent since 1986. Using plant spacing, the number of vines was estimated for the first time. There was a State average 560 vines per acre. Unlike other fruits, the plant density has not increased markedly over time.

Concords constituted 80 percent of the 12,000 acres of grapes, down from 85 percent in 1986. Meanwhile new plantings of Niagaras pushed that variety of juice grape to 13 percent of the total, up from 8 percent in 1986. Wine grape

acres rose to 800 acres up from 760 in 1986. Virtually all the juice grapes are in Van Buren and Berrien Counties and a couple of townships of Kalamazoo and Cass Counties. Nearly 40 percent of wine grapes, on the other hand, are located in Leelanau and Grand Traverse Counties in the Northwest.

The trellis type was obtained for all but 110 acres. Of the known vine trellises, about 46 percent of the acres had a single wire cordon, and 33 percent had the 4-arm kniffen system.

**Table 31. GRAPE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST . . . . .	16	18	0	3	0	19	8	4
WEST CENTRAL . . . . .	1	0	0	0	1	1	1	1
Berrien . . . . .	140	120	210	110	98	65	37	57
Van Buren . . . . .	35	58	83	58	19	19	1	17
Others . . . . .	15	2	23	1	6	0	0	1
SOUTHWEST . . . . .	190	180	320	170	120	84	38	75
EAST . . . . .	0	0	13	25	1	4	1	0
STATE . . . . .	210	200	330	200	120	110	48	80

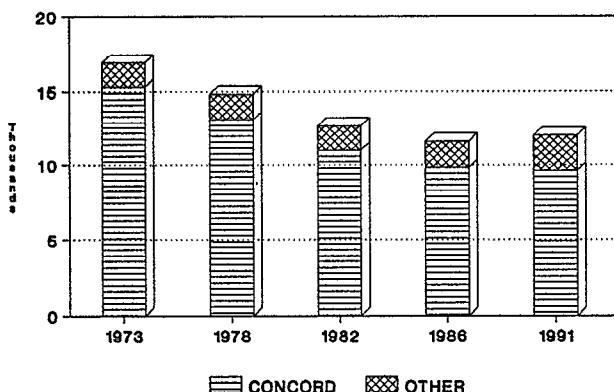
**Table 32. GRAPE VINES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST . . . . .	12,300	14,500	0	2,200	0	11,800	5,400	3,400
WEST CENTRAL . . . . .	0	100	0	0	400	200	400	500
Berrien . . . . .	84,700	62,700	120,000	63,800	55,600	40,500	22,500	31,800
Van Buren . . . . .	18,700	31,400	43,300	29,700	12,400	10,100	0	9,600
Others . . . . .	7,300	1,100	14,400	700	3,700	0	0	400
SOUTHWEST . . . . .	111,000	95,200	178,000	94,200	71,700	50,600	22,500	41,800
EAST . . . . .	0	0	5,200	32,600	500	2,100	400	1,200
STATE . . . . .	123,000	110,000	183,000	129,000	72,600	64,700	28,700	46,900

**Table 33. GRAPE ACRES BY YEAR PLANTED AND TRELLIS TYPE**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Geneva Double Curtain .	8	6	5	26	26	14	1	17
4-Arm Kniffen . . . . .	54	49	190	75	12	14	18	12
Single Wire Cordon . . .	130	110	88	92	61	63	19	27
Other . . . . .	14	28	28	4	0	16	8	4
Unknown . . . . .	3	3	19	1	21	0	1	20
STATE . . . . .	210	200	330	200	120	110	48	80

**MICHIGAN GRAPE ACRES  
BY VARIETY AND YEAR**

**Table 31. GRAPE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST . . . . .	0	3	25	52	30	1	180
WEST CENTRAL . . . . .	6	5	13	3	1	8	40
Berrien . . . . .	100	120	520	620	780	3,120	6,100
Van Buren . . . . .	10	5	40	290	210	3,660	4,500
Others . . . . .	9	29	18	100	240	660	1,100
SOUTHWEST . . . . .	120	150	580	1,010	1,230	7,440	11,700
EAST . . . . .	0	2	35	2	0	20	100
<b>STATE . . . . .</b>	<b>130</b>	<b>160</b>	<b>650</b>	<b>1,070</b>	<b>1,260</b>	<b>7,470</b>	<b>12,000</b>

**Table 32. GRAPE VINES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST . . . . .	0	1,200	16,400	47,900	19,500	500	135,000
WEST CENTRAL . . . . .	2,800	2,200	8,500	1,400	0	4,000	20,500
Berrien . . . . .	56,700	69,900	301,000	367,000	428,000	1,700,000	3,400,000
Van Buren . . . . .	8,100	3,300	23,800	168,000	123,000	1,970,000	2,450,000
Others . . . . .	4,500	18,000	10,200	58,200	148,000	348,000	615,000
SOUTHWEST . . . . .	69,300	91,200	335,000	593,000	699,000	4,020,000	6,470,000
EAST . . . . .	0	1,100	20,400	1,100	0	7,700	72,300
<b>STATE . . . . .</b>	<b>72,100</b>	<b>95,700</b>	<b>380,000</b>	<b>643,000</b>	<b>718,000</b>	<b>4,030,000</b>	<b>6,700,000</b>

**Table 33. GRAPE ACRES BY YEAR PLANTED AND TRELLIS TYPE—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Geneva Double Curtain .	14	10	83	330	390	920	1,850
4-Arm Kniffen . . . . .	42	60	260	210	350	2,550	3,900
Single Wire Cordon . . .	62	86	180	430	460	3,690	5,500
Other . . . . .	8	4	26	71	48	200	460
Unknown . . . . .	0	0	100	28	11	110	320
<b>STATE . . . . .</b>	<b>130</b>	<b>160</b>	<b>650</b>	<b>1,070</b>	<b>1,260</b>	<b>7,470</b>	<b>12,000</b>

Table 34.

## GRAPE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Concord .....	0	0	0	0	0	0	1	0
Delaware .....	0	0	0	0	0	0	0	0
Niagara .....	0	0	13	24	0	0	0	0
Aurore .....	0	0	0	0	0	0	0	0
Baco Noir .....	0	0	0	0	0	0	0	0
Chambourcin .....	0	0	0	0	0	0	0	0
Chancellor .....	0	0	0	0	0	0	0	1
Chardonnay .....	8	7	0	1	0	8	2	0
De Chaunac .....	0	0	0	0	0	0	0	0
Foch .....	0	1	0	2	0	0	0	0
Seyval Blanc .....	0	0	0	0	0	0	0	0
Vidal Blanc .....	0	0	0	0	0	0	0	0
Vignoles .....	0	3	0	0	0	0	0	0
White Riesling .....	5	0	0	0	0	6	6	2
Others .....	3	8	0	2	2	2	1	2
Unknown .....	0	0	0	0	0	7	0	0
<b>NORTHWEST, WEST, CENTRAL AND EAST</b>	<b>16</b>	<b>19</b>	<b>13</b>	<b>29</b>	<b>2</b>	<b>23</b>	<b>10</b>	<b>5</b>
Concord .....	72	70	91	24	12	47	24	27
Delaware .....	0	0	0	0	0	0	0	0
Niagara .....	100	92	200	120	110	26	0	43
Aurore .....	0	0	0	0	0	0	0	0
Baco Noir .....	0	0	0	0	0	0	0	0
Chambourcin .....	2	0	0	6	0	5	0	1
Chancellor .....	5	0	3	0	0	0	4	0
Chardonnay .....	4	5	5	1	0	4	0	0
De Chaunac .....	0	0	0	0	0	0	0	0
Foch .....	0	0	0	0	0	0	0	0
Seyval Blanc .....	0	0	2	4	0	0	1	0
Vidal Blanc .....	0	0	1	0	0	1	8	0
Vignoles .....	4	2	12	14	0	0	0	0
White Riesling .....	0	1	0	0	0	0	0	1
Others .....	4	8	3	3	0	1	1	0
Unknown .....	0	0	1	0	0	0	0	3
<b>SOUTHWEST</b>	<b>190</b>	<b>180</b>	<b>320</b>	<b>170</b>	<b>120</b>	<b>84</b>	<b>38</b>	<b>75</b>
Concord .....	72	70	91	24	12	47	25	27
Delaware .....	0	0	0	0	0	0	0	0
Niagara .....	100	92	210	140	110	26	0	43
Aurore .....	0	0	0	0	0	0	0	0
Baco Noir .....	0	0	0	0	0	0	0	0
Chambourcin .....	2	0	0	6	0	5	0	1
Chancellor .....	5	0	3	0	0	0	4	1
Chardonnay .....	12	12	5	2	0	12	2	0
De Chaunac .....	0	0	0	0	0	0	0	0
Foch .....	0	1	0	2	0	0	0	0
Seyval Blanc .....	0	0	2	4	0	0	1	0
Vidal Blanc .....	0	0	1	0	0	1	8	0
Vignoles .....	4	5	12	14	0	0	0	0
White Riesling .....	5	1	0	0	0	6	6	3
Others .....	7	16	3	5	2	3	2	2
Unknown .....	0	0	1	0	0	7	0	3
<b>STATE</b>	<b>210</b>	<b>200</b>	<b>330</b>	<b>200</b>	<b>120</b>	<b>110</b>	<b>48</b>	<b>80</b>

**Table 34. GRAPE ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Concord .....	1	1	3	2	0	24	32
Delaware .....	0	0	2	0	0	0	2
Niagara .....	0	0	3	1	0	0	41
Aurore .....	0	0	6	0	7	0	13
Baco Noir .....	0	0	2	2	0	0	4
Chambourcin .....	0	0	0	0	0	0	0
Chancellor .....	0	0	0	0	0	0	1
Chardonnay .....	0	0	2	10	0	0	38
De Chaunac .....	0	0	8	4	6	0	18
Foch .....	0	1	0	3	1	0	8
Seyval Blanc .....	4	1	7	0	4	0	16
Vidal Blanc .....	1	0	1	0	0	0	2
Vignoles .....	0	2	32	2	9	0	48
White Riesling .....	0	0	1	20	0	0	40
Others .....	0	1	4	10	3	3	41
Unknown .....	0	2	2	3	0	1	15
<b>NORTHWEST, WEST CENTRAL AND EAST</b>	<b>6</b>	<b>8</b>	<b>73</b>	<b>57</b>	<b>30</b>	<b>28</b>	<b>320</b>
Concord .....	49	40	380	690	1,070	6,990	9,590
Delaware .....	0	0	0	0	6	35	41
Niagara .....	61	38	86	150	78	390	1,490
Aurore .....	0	0	4	10	1	0	15
Baco Noir .....	0	0	1	3	22	0	26
Chambourcin .....	0	0	0	2	0	1	17
Chancellor .....	0	0	1	4	0	0	17
Chardonnay .....	0	1	8	3	0	0	31
De Chaunac .....	0	0	0	20	0	0	20
Foch .....	0	0	0	32	2	0	34
Seyval Blanc .....	1	16	7	43	4	0	78
Vidal Blanc .....	4	16	86	22	24	0	160
Vignoles .....	0	8	2	17	1	0	60
White Riesling .....	1	5	7	2	0	0	17
Others .....	1	20	1	14	18	23	97
Unknown .....	4	6	0	0	0	4	18
<b>SOUTHWEST</b>	<b>120</b>	<b>150</b>	<b>580</b>	<b>1,010</b>	<b>1,230</b>	<b>7,440</b>	<b>11,700</b>
Concord .....	50	41	380	690	1,070	7,010	9,610
Delaware .....	0	0	2	0	6	35	43
Niagara .....	61	38	89	150	78	390	1,530
Aurore .....	0	0	10	10	8	0	28
Baco Noir .....	0	0	3	5	22	0	30
Chambourcin .....	0	0	0	2	0	1	17
Chancellor .....	0	0	1	4	0	0	18
Chardonnay .....	0	1	10	13	0	0	69
De Chaunac .....	0	0	8	24	6	0	38
Foch .....	0	1	0	35	3	0	42
Seyval Blanc .....	5	17	14	43	8	0	94
Vidal Blanc .....	5	16	87	22	24	0	160
Vignoles .....	0	10	34	19	10	0	110
White Riesling .....	1	5	8	22	0	0	57
Others .....	1	21	5	24	21	26	140
Unknown .....	4	8	2	3	0	5	33
<b>STATE</b>	<b>130</b>	<b>160</b>	<b>650</b>	<b>1,070</b>	<b>1,260</b>	<b>7,470</b>	<b>12,000</b>

**Table 35.** OTHER GRAPE VARIETIES

VARIETY	Acres
Cayuga White .....	13
Cascade .....	3
Chelois .....	11
Gewurtztraminer ...	4
Pinot Noir .....	9
Fredonia .....	22
Himrod .....	5
Merlot .....	4
Pinot Gris .....	3
All Others .....	66
<b>TOTAL</b>	<b>140</b>

**Table 36.** GRAPE OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups								TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	200+	
1991 Operations ....	129	150	129	63	50	36	13	5	575
Acres .....	280	990	1,690	1,470	1,860	2,520	1,690	1,500	12,000
1986 Operations ....	216	187	163	52	56	30	15	2	721
Acres .....	460	1,220	2,160	1,250	2,030	1,930	1,910	640	11,600
1982 Operations ....	242	217	193	61	56	44	7	2	822
Acres .....	522	1,432	2,591	1,431	2,051	2,972	999	648	12,676

# PEACHES

Acres in peaches declined by 6 percent from 1986. The high density of new plantings, however, pushed the total tree count up by 5 percent over the same period. There were 133 trees per acre, up from 106 in 1982.

About two-thirds of the 1.1 million peach trees were accounted for by five varieties. These were, in order, Redhaven, Baby Gold, Canadian Harmony, Redskin and Cresthaven. Over 40 percent of peach acres are in Berrien County.

## OTHER PEACH VARIETIES

Table 37.

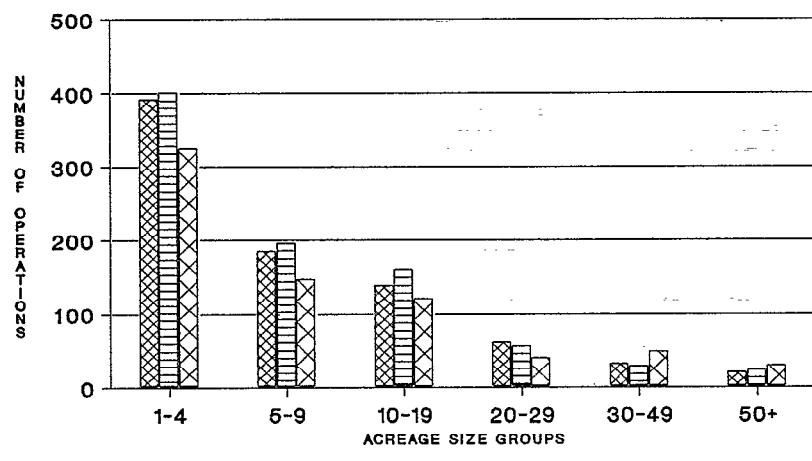
VARIETY	Acres	Trees
Candor .....	29	3,300
Harbrite .....	50	6,200
Jersey Dawn .....	20	2,700
Jim Dandee .....	98	15,300
Sweet Haven .....	18	2,200
Alberta .....	13	2,000
Biscoe .....	7	1,000
Encore .....	20	2,900
Harbelle .....	26	3,200
Harbinger .....	9	1,000
Harcrest .....	12	1,900
Reliance .....	8	800
Sweet Sue .....	35	4,300
All Others .....	160	23,500
<b>TOTAL</b>	<b>505</b>	<b>70,300</b>

Table 38.

## PEACH OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups								TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	200+	
1991 Operations ....	325	147	121	41	49	26	4	0	713
Acres .....	600	930	1,650	940	1,800	1,790	580	0	8,290
1986 Operations ....	401	196	160	57	29	17	5	2	867
Acres .....	810	1,250	2,090	1,280	1,020	1,230	560	560	8,800
1982 Operations ....	392	185	139	62	33	15	5	1	832
Acres .....	790	1,173	1,785	1,404	1,249	1,047	576	307	8,331

## MICHIGAN PEACH OPERATIONS BY ACREAGE SIZE GROUP



**Table 39. PEACH ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Leelanau .....	0	3	2	3	0	0	0	19
Manistee .....	8	9	20	1	7	10	15	4
Others .....	1	1	4	0	5	2	8	3
<b>NORTHWEST</b>	<b>9</b>	<b>13</b>	<b>26</b>	<b>4</b>	<b>13</b>	<b>12</b>	<b>23</b>	<b>25</b>
Kent .....	17	31	3	63	14	25	3	18
Mason .....	12	18	15	8	2	4	18	7
Muskegon .....	74	0	20	3	8	21	32	22
Newaygo .....	1	4	14	43	4	5	4	10
Oceana .....	150	92	57	86	71	80	90	22
Ottawa .....	12	6	7	8	26	12	12	1
Others .....	8	1	2	2	2	18	2	10
<b>WEST CENTRAL</b>	<b>270</b>	<b>150</b>	<b>120</b>	<b>210</b>	<b>130</b>	<b>170</b>	<b>160</b>	<b>89</b>
Allegan .....	7	31	52	30	48	24	36	14
Berrien .....	180	110	150	180	170	210	200	250
Van Buren .....	49	41	73	42	74	65	33	130
Others .....	1	4	0	2	3	4	8	8
<b>SOUTHWEST</b>	<b>240</b>	<b>190</b>	<b>270</b>	<b>250</b>	<b>290</b>	<b>300</b>	<b>280</b>	<b>400</b>
Macomb .....	3	7	7	0	5	0	10	15
Others .....	1	4	12	27	12	33	18	3
<b>EAST</b>	<b>4</b>	<b>11</b>	<b>19</b>	<b>27</b>	<b>17</b>	<b>33</b>	<b>28</b>	<b>18</b>
<b>STATE</b> .....	<b>520</b>	<b>370</b>	<b>440</b>	<b>490</b>	<b>450</b>	<b>520</b>	<b>500</b>	<b>530</b>

**Table 40. PEACH TREES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Leelanau .....	0	400	200	400	0	0	0	2,100
Manistee .....	1,000	1,100	2,100	100	900	1,000	1,700	500
Others .....	100	200	500	0	600	300	900	400
<b>NORTHWEST</b>	<b>1,100</b>	<b>1,700</b>	<b>2,800</b>	<b>500</b>	<b>1,500</b>	<b>1,300</b>	<b>2,600</b>	<b>3,000</b>
Kent .....	3,700	8,900	400	10,500	1,800	3,400	500	2,300
Mason .....	2,500	2,900	2,300	900	200	600	2,000	800
Muskegon .....	9,200	0	5,300	400	1,500	3,000	5,300	2,800
Newaygo .....	100	700	1,900	6,600	600	1,000	500	1,300
Oceana .....	20,600	12,400	6,700	10,600	9,000	10,000	10,500	2,800
Ottawa .....	1,500	900	1,000	3,200	3,900	1,600	1,400	100
Others .....	1,100	100	200	200	200	2,200	400	1,200
<b>WEST CENTRAL</b>	<b>38,700</b>	<b>25,900</b>	<b>17,800</b>	<b>32,400</b>	<b>17,200</b>	<b>21,800</b>	<b>20,600</b>	<b>11,300</b>
Allegan .....	1,000	4,100	5,800	4,300	6,300	2,900	4,900	1,900
Berrien .....	28,500	19,500	20,600	23,500	20,500	29,400	28,100	33,500
Van Buren .....	7,000	7,100	11,100	6,000	10,000	7,800	5,200	18,200
Others .....	200	800	0	300	300	500	900	800
<b>SOUTHWEST</b>	<b>36,700</b>	<b>31,500</b>	<b>37,500</b>	<b>34,100</b>	<b>37,100</b>	<b>40,600</b>	<b>39,100</b>	<b>54,400</b>
Macomb .....	400	900	800	0	700	0	1,200	1,900
Others .....	100	600	1,400	3,200	1,500	4,100	2,500	400
<b>EAST</b>	<b>500</b>	<b>1,500</b>	<b>2,200</b>	<b>3,200</b>	<b>2,200</b>	<b>4,100</b>	<b>3,700</b>	<b>2,300</b>
<b>STATE</b> .....	<b>77,000</b>	<b>60,600</b>	<b>60,300</b>	<b>70,200</b>	<b>58,000</b>	<b>67,300</b>	<b>66,000</b>	<b>71,000</b>

**Table 39. PEACH ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT .....	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Leelanau .....	8	16	24	8	0	0	83
Manistee .....	33	46	11	21	0	3	190
Others .....	12	4	76	7	8	2	130
<b>NORTHWEST</b> .....	<b>53</b>	<b>66</b>	<b>110</b>	<b>36</b>	<b>8</b>	<b>5</b>	<b>400</b>
Kent .....	39	29	66	58	25	6	400
Mason .....	45	26	84	39	19	8	300
Muskegon .....	13	13	9	31	0	0	250
Newaygo .....	18	24	99	48	3	0	280
Oceana .....	61	110	220	89	9	14	1,150
Ottawa .....	2	7	39	27	0	0	160
Others .....	10	7	19	4	3	0	86
<b>WEST CENTRAL</b> .....	<b>190</b>	<b>220</b>	<b>540</b>	<b>300</b>	<b>59</b>	<b>28</b>	<b>2,630</b>
Allegan .....	26	50	140	54	11	53	580
Berrien .....	330	270	920	270	62	49	3,350
Van Buren .....	73	55	270	18	0	1	920
Others .....	17	26	16	5	0	0	94
<b>SOUTHWEST</b> .....	<b>450</b>	<b>400</b>	<b>1,350</b>	<b>350</b>	<b>73</b>	<b>100</b>	<b>4,950</b>
Macomb .....	4	18	25	12	0	0	110
Others .....	23	4	40	3	7	0	190
<b>EAST</b> .....	<b>27</b>	<b>22</b>	<b>65</b>	<b>15</b>	<b>7</b>	<b>0</b>	<b>300</b>
<b>STATE</b> .....	<b>720</b>	<b>710</b>	<b>2,070</b>	<b>700</b>	<b>140</b>	<b>130</b>	<b>8,290</b>

**Table 40. PEACH TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT .....	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Leelanau .....	1,100	1,900	2,500	900	0	0	9,500
Manistee .....	4,200	6,100	1,500	2,100	0	400	22,700
Others .....	1,500	600	11,000	700	700	200	17,700
<b>NORTHWEST</b> .....	<b>6,800</b>	<b>8,600</b>	<b>15,000</b>	<b>3,700</b>	<b>700</b>	<b>600</b>	<b>49,900</b>
Kent .....	4,900	3,500	9,200	7,800	3,100	400	60,400
Mason .....	5,000	3,500	10,800	4,400	2,100	1,100	39,100
Muskegon .....	1,500	1,900	1,200	3,400	0	0	35,500
Newaygo .....	2,900	5,100	15,000	4,800	300	0	40,800
Oceana .....	7,200	14,500	29,000	8,600	1,000	1,100	144,000
Ottawa .....	200	900	4,800	3,100	0	0	22,600
Others .....	1,200	900	2,500	400	300	0	10,900
<b>WEST CENTRAL</b> .....	<b>22,900</b>	<b>30,300</b>	<b>72,500</b>	<b>32,500</b>	<b>6,800</b>	<b>2,600</b>	<b>353,000</b>
Allegan .....	4,000	5,900	16,900	6,800	1,700	6,200	72,700
Berrien .....	43,100	34,100	120,000	33,800	7,900	5,000	448,000
Van Buren .....	11,500	8,500	36,900	2,200	0	100	132,000
Others .....	1,800	3,400	1,800	600	0	0	11,400
<b>SOUTHWEST</b> .....	<b>60,400</b>	<b>51,900</b>	<b>176,000</b>	<b>43,400</b>	<b>9,600</b>	<b>11,300</b>	<b>664,000</b>
Macomb .....	500	2,100	2,700	1,200	0	0	12,400
Others .....	2,900	600	5,000	300	800	0	23,400
<b>EAST</b> .....	<b>3,400</b>	<b>2,700</b>	<b>7,700</b>	<b>1,500</b>	<b>800</b>	<b>0</b>	<b>35,800</b>
<b>STATE</b> .....	<b>93,500</b>	<b>93,500</b>	<b>272,000</b>	<b>81,100</b>	<b>17,900</b>	<b>14,500</b>	<b>1,100,000</b>

**Table 41.****PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	0	0	0	0	0	0	0	0
Bellaire .....	0	1	2	1	1	2	4	0
Canadian Harmony	2	2	1	1	0	1	2	4
Cresthaven .....	0	1	0	0	1	1	0	2
Fayette .....	0	0	5	0	0	0	1	0
Garnet Beauty .....	0	0	0	0	3	3	3	2
Glohaven .....	2	2	4	3	5	2	3	6
Jayhaven .....	0	2	0	0	0	0	1	0
Loring .....	0	0	11	0	0	1	0	0
Newhaven .....	0	1	0	2	2	2	2	1
Redhaven .....	7	8	20	14	10	21	23	24
Redkist .....	0	2	0	1	0	7	1	0
Redskin .....	0	0	1	0	4	3	2	0
Suncrest .....	0	0	0	1	0	0	1	0
Other .....	0	2	1	8	3	3	6	2
Unknown .....	1	3	0	0	2	1	2	2
NORTHWEST AND EAST	13	24	45	31	30	45	51	43

**Table 42.****PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	0	0	0	0	0	0	0	0
Bellaire .....	0	100	200	200	100	200	600	0
Canadian Harmony	300	300	100	0	100	100	200	500
Cresthaven .....	0	100	0	0	100	100	0	200
Fayette .....	0	0	500	0	0	0	100	0
Garnet Beauty .....	0	100	0	0	400	500	700	400
Glohaven .....	300	300	600	200	600	100	300	800
Jayhaven .....	0	300	0	0	0	0	200	0
Loring .....	100	0	1,100	0	0	100	100	100
Newhaven .....	0	100	0	200	200	200	300	200
Redhaven .....	800	1,000	2,300	1,600	1,200	2,600	2,400	2,700
Redkist .....	0	200	0	100	0	700	100	0
Redskin .....	0	0	100	0	400	200	200	0
Suncrest .....	0	0	0	100	0	0	100	0
Other .....	0	300	100	1,300	400	500	800	200
Unknown .....	100	400	0	0	200	100	200	200
NORTHWEST AND EAST	1,600	3,200	5,000	3,700	3,700	5,400	6,300	5,300

**Table 41. PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	0	0	1	0	0	0	1
Bellaire .....	0	1	0	0	0	0	12
Canadian Harmony	15	4	8	0	1	0	41
Cresthaven .....	0	6	6	5	1	0	22
Fayette .....	0	0	0	0	0	0	6
Garnet Beauty .....	2	4	11	3	1	0	31
Glohaven .....	1	7	10	6	1	0	52
Jayhaven .....	1	9	6	2	0	0	22
Loring .....	1	0	0	0	0	0	14
Newhaven .....	0	1	3	0	0	1	14
Redhaven .....	54	47	110	29	9	5	380
Redkist .....	0	0	1	0	0	0	11
Redskin .....	1	6	4	0	1	0	22
Suncrest .....	0	0	0	0	0	0	2
Other .....	2	1	4	3	0	0	36
Unknown .....	3	2	11	4	0	0	30
NORTHWEST AND EAST .....	80	88	180	51	15	5	700

**Table 42. PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

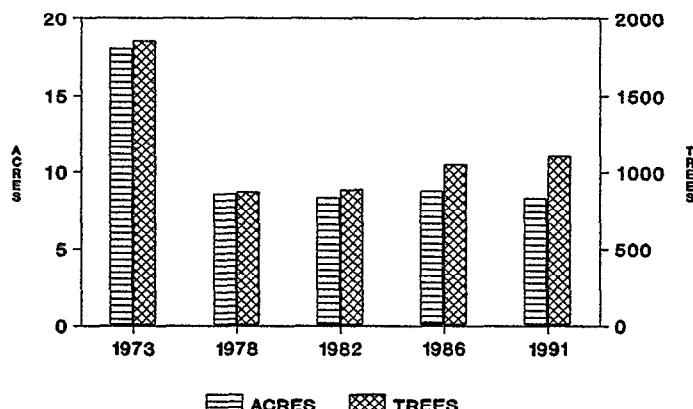
VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	0	0	100	0	0	0	100
Bellaire .....	0	100	0	0	0	0	1,500
Canadian Harmony	2,000	500	1,100	0	100	0	5,300
Cresthaven .....	0	800	800	600	100	0	2,800
Fayette .....	0	0	0	0	0	0	600
Garnet Beauty .....	200	500	1,800	200	200	0	5,000
Glohaven .....	100	900	1,200	600	100	0	6,100
Jayhaven .....	200	1,300	800	100	0	0	2,900
Loring .....	200	0	0	0	0	0	1,700
Newhaven .....	0	200	400	0	0	100	1,900
Redhaven .....	6,900	5,700	14,300	3,100	800	500	45,900
Redkist .....	0	0	200	0	0	0	1,300
Redskin .....	100	800	600	0	100	0	2,500
Suncrest .....	0	0	0	0	0	0	200
Other .....	300	200	400	200	100	0	4,800
Unknown .....	200	300	1,000	400	0	0	3,100
NORTHWEST AND EAST .....	10,200	11,300	22,700	5,200	1,500	600	85,700

**Table 41.****PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	79	82	46	69	61	58	38	6
Bellaire .....	68	4	0	1	2	3	0	2
Canadian Harmony	8	15	3	48	15	29	26	19
Cresthaven .....	63	7	1	31	6	0	2	1
Fayette .....	2	0	0	0	3	3	0	0
Garnet Beauty .....	2	0	0	0	2	1	1	1
Glohaven .....	1	0	5	1	0	7	2	2
Jayhaven .....	1	0	0	3	0	0	0	0
Loring .....	0	4	1	4	0	0	0	0
Newhaven .....	4	3	6	15	0	2	4	0
Redhaven .....	22	10	35	15	31	50	73	52
Redkist .....	0	0	0	0	0	0	0	3
Redskin .....	0	2	2	1	2	6	0	0
Suncrest .....	0	4	7	6	2	0	0	0
Other .....	21	15	13	12	3	7	10	0
Unknown .....	0	5	0	6	0	1	3	5
WEST CENTRAL	270	150	120	210	130	170	160	89

**Table 42.****PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	11,200	11,100	5,100	8,400	7,600	7,700	4,400	700
Bellaire .....	9,800	900	0	100	300	500	0	200
Canadian Harmony	1,000	4,300	400	9,900	2,200	4,400	3,800	2,700
Cresthaven .....	8,600	1,600	200	4,800	900	0	100	100
Fayette .....	200	0	0	0	400	400	0	0
Garnet Beauty .....	200	0	0	100	300	0	100	200
Glohaven .....	200	0	700	100	0	800	300	200
Jayhaven .....	100	0	0	400	0	0	0	0
Loring .....	0	1,400	100	500	0	0	0	0
Newhaven .....	500	800	1,800	2,000	0	200	700	0
Redhaven .....	3,600	1,900	6,100	2,000	4,400	6,300	10,100	6,300
Redkist .....	0	0	0	100	0	0	0	300
Redskin .....	0	300	200	200	300	700	0	0
Suncrest .....	0	700	1,000	900	300	0	0	0
Other .....	3,300	2,200	2,200	2,200	500	700	800	0
Unknown .....	0	700	0	700	0	100	300	600
WEST CENTRAL	38,700	25,900	17,800	32,400	17,200	21,800	20,600	11,300

**MICHIGAN PEACHES  
ACRES AND TREES  
(Thousands)**

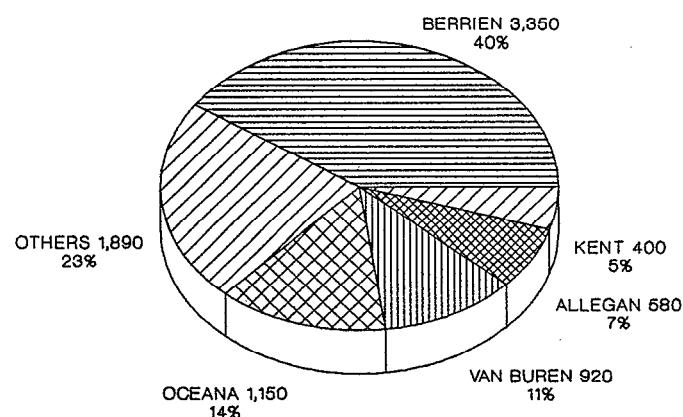
**Table 41. PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	61	42	95	78	4	14	730
Bellaire .....	1	0	0	1	0	0	81
Canadian Harmony	17	14	52	21	2	0	270
Cresthaven .....	9	1	17	20	0	0	160
Fayette .....	0	0	0	0	0	0	7
Garnet Beauty .....	6	2	7	4	5	2	32
Glohaven .....	2	3	17	28	0	0	68
Jayhaven .....	0	3	2	1	0	0	10
Loring .....	0	0	0	0	0	0	9
Newhaven .....	4	1	1	3	0	0	44
Redhaven .....	64	120	320	120	46	12	970
Redkist .....	2	5	0	1	0	0	11
Redskin .....	1	5	1	1	0	0	21
Suncrest .....	0	0	0	0	0	0	19
Other .....	1	1	15	4	0	0	100
Unknown .....	19	23	17	16	2	0	97
WEST CENTRAL	190	220	540	300	59	28	2,630

**Table 42. PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	6,900	5,600	12,900	7,900	400	1,100	91,000
Bellaire .....	100	0	0	100	0	0	12,000
Canadian Harmony	2,100	2,100	6,700	3,000	200	0	42,800
Cresthaven .....	900	100	2,600	2,200	0	0	22,100
Fayette .....	0	0	0	0	0	0	1,000
Garnet Beauty .....	900	200	1,100	300	500	200	4,100
Glohaven .....	300	400	2,100	3,000	0	0	8,100
Jayhaven .....	0	300	300	200	0	0	1,300
Loring .....	0	0	0	0	0	0	2,000
Newhaven .....	400	200	100	400	0	0	7,100
Redhaven .....	8,200	17,000	42,500	13,000	5,500	1,400	128,000
Redkist .....	300	600	0	100	0	0	1,400
Redskin .....	200	600	200	100	0	0	2,800
Suncrest .....	0	0	100	0	0	0	3,000
Other .....	200	100	1,800	400	0	0	14,400
Unknown .....	2,400	3,100	2,100	1,600	200	0	11,800
WEST CENTRAL	22,900	30,300	72,500	32,300	6,800	2,700	353,000

### TOP PEACH COUNTIES ACRES AND PERCENTS

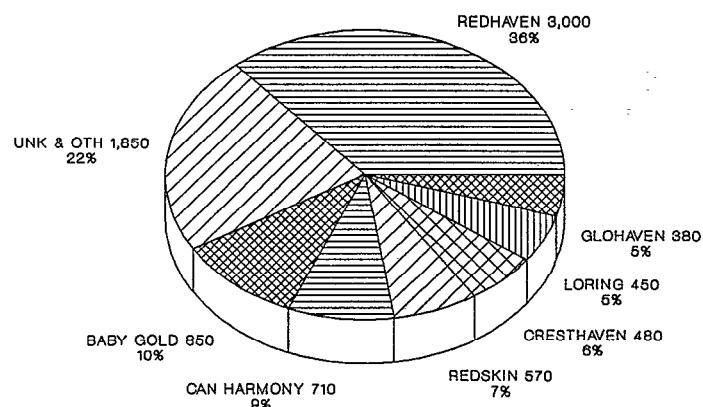


**Table 41.****PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	0	6	7	16	7	8	6	8
Bellaire .....	7	10	19	5	7	5	5	1
Canadian Harmony	20	15	24	7	25	32	27	23
Cresthaven .....	7	12	26	24	17	13	12	29
Fayette .....	5	12	6	16	1	3	28	7
Garnet Beauty .....	3	5	1	2	7	5	3	6
Glohaven .....	9	15	6	2	21	6	14	59
Jayhaven .....	3	1	1	1	6	7	6	7
Loring .....	10	27	38	27	29	43	42	29
Newhaven .....	15	8	21	19	15	20	18	21
Redhaven .....	76	36	47	73	69	54	60	110
Redkist .....	6	6	0	0	10	8	2	3
Redskin .....	22	8	20	25	39	33	32	74
Suncrest .....	2	6	9	3	5	22	9	4
Other .....	41	13	38	26	34	44	15	14
Unknown .....	12	12	12	0	2	3	7	4
<b>SOUTHWEST</b>	<b>240</b>	<b>190</b>	<b>270</b>	<b>250</b>	<b>290</b>	<b>300</b>	<b>280</b>	<b>400</b>

**Table 42.****PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	0	900	700	2,100	800	900	1,000	1,000
Bellaire .....	900	2,000	2,600	700	900	400	700	100
Canadian Harmony	2,700	2,000	3,000	900	3,200	4,000	3,600	2,900
Cresthaven .....	900	1,400	3,200	3,000	2,100	1,800	1,600	3,600
Fayette .....	600	2,400	600	2,900	100	400	3,900	1,100
Garnet Beauty .....	300	400	200	300	600	600	400	600
Glohaven .....	1,100	3,000	900	400	2,600	1,000	2,800	8,500
Jayhaven .....	400	300	100	100	1,200	800	900	900
Loring .....	1,200	5,000	5,300	3,400	3,900	5,200	5,400	4,300
Newhaven .....	2,100	1,200	3,500	2,800	2,000	3,000	2,300	2,400
Redhaven .....	12,600	4,500	6,300	9,700	8,900	6,800	7,700	14,500
Redkist .....	1,500	800	0	0	1,100	1,000	200	300
Redskin .....	2,400	1,100	2,400	3,700	4,600	4,500	4,500	11,700
Suncrest .....	400	1,600	1,100	400	600	3,300	1,300	600
Other .....	6,700	2,000	4,700	3,700	4,300	6,500	1,800	1,600
Unknown .....	2,900	2,900	2,900	0	200	400	1,000	300
<b>SOUTHWEST</b>	<b>36,700</b>	<b>31,500</b>	<b>37,500</b>	<b>34,100</b>	<b>37,100</b>	<b>40,600</b>	<b>39,100</b>	<b>54,400</b>

**PEACHES BY VARIETY  
ACRES AND PERCENTS**

**Table 41. PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	3	16	35	9	0	2	120
Bellaire .....	5	0	9	0	0	0	73
Canadian Harmony	64	25	120	23	0	0	400
Cresthaven .....	23	34	66	28	5	2	300
Fayette .....	16	6	7	5	0	0	110
Garnet Beauty .....	8	18	25	16	10	7	110
Glohaven .....	15	16	59	12	5	18	260
Jayhaven .....	11	22	25	4	0	0	94
Loring .....	57	30	70	13	3	6	420
Newhaven .....	26	11	22	5	0	0	200
Redhaven .....	120	150	600	160	45	39	1,640
Redkist .....	4	12	44	13	0	0	110
Redskin .....	53	26	120	47	3	18	520
Suncrest .....	5	9	18	0	0	0	91
Other .....	33	24	75	12	3	7	380
Unknown .....	5	4	61	1	0	5	120
<b>SOUTHWEST</b>	<b>450</b>	<b>400</b>	<b>1,350</b>	<b>350</b>	<b>73</b>	<b>100</b>	<b>4,950</b>

**Table 42. PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	400	1,800	4,300	1,100	0	400	15,400
Bellaire .....	800	0	1,200	0	0	0	10,300
Canadian Harmony	9,100	2,800	15,100	2,500	0	0	51,800
Cresthaven .....	3,400	5,100	8,000	3,300	700	200	38,300
Fayette .....	2,900	900	1,000	900	0	0	17,700
Garnet Beauty .....	800	2,400	3,700	2,100	1,400	700	14,500
Glohaven .....	1,800	2,100	7,500	1,300	500	2,300	35,800
Jayhaven .....	1,700	3,100	3,500	400	0	0	13,400
Loring .....	7,400	3,600	8,200	1,500	600	600	55,600
Newhaven .....	4,000	1,600	3,300	700	0	0	28,900
Redhaven .....	14,800	19,100	78,400	20,100	5,600	4,700	214,000
Redkist .....	500	1,400	5,600	1,700	0	0	14,100
Redskin .....	7,100	3,200	16,600	6,000	300	1,500	69,600
Suncrest .....	700	1,600	2,600	0	0	0	14,200
Other .....	4,300	2,700	10,200	1,700	500	400	51,100
Unknown .....	700	500	7,100	100	0	500	19,500
<b>SOUTHWEST</b>	<b>60,400</b>	<b>51,900</b>	<b>176,000</b>	<b>43,400</b>	<b>9,600</b>	<b>11,300</b>	<b>664,000</b>

**Table 41.****PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	79	88	53	85	68	65	44	13
Bellaire .....	75	15	21	7	10	9	9	3
Canadian Harmony	30	32	28	56	40	62	56	46
Cresthaven .....	71	19	28	55	24	14	13	31
Fayette .....	7	12	21	16	4	6	29	8
Garnet Beauty .....	5	5	1	3	12	8	6	9
Glohaven .....	13	17	15	7	26	15	19	67
Jayhaven .....	4	1	2	5	6	7	7	11
Loring .....	10	31	49	31	29	44	42	29
Newhaven .....	19	13	27	36	16	24	24	22
Redhaven .....	100	54	100	100	110	130	160	190
Redkist .....	11	13	14	2	18	26	18	24
Redskin .....	22	9	23	26	45	42	34	75
Suncrest .....	2	10	15	10	9	22	10	4
Other .....	63	33	53	45	40	54	30	15
Unknown .....	12	17	12	6	4	4	11	10
<b>STATE</b>	<b>520</b>	<b>370</b>	<b>440</b>	<b>490</b>	<b>450</b>	<b>520</b>	<b>500</b>	<b>530</b>

**Table 42.****PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Babygold .....	11,200	12,000	5,800	10,500	8,400	8,600	5,400	1,700
Bellaire .....	10,700	3,000	2,800	1,000	1,300	1,100	1,300	300
Canadian Harmony	4,000	6,600	3,500	10,800	5,500	8,500	7,600	6,100
Cresthaven .....	9,500	3,100	3,400	7,800	3,100	1,900	1,700	3,900
Fayette .....	800	2,400	1,100	2,900	500	800	4,000	1,100
Garnet Beauty .....	500	500	200	400	1,300	1,100	1,200	1,200
Glohaven .....	1,600	3,300	2,200	700	3,200	1,900	3,400	9,500
Jayhaven .....	500	600	100	500	1,200	800	1,100	900
Loring .....	1,300	6,400	6,500	3,900	3,900	5,300	5,500	4,400
Newhaven .....	2,600	2,100	5,300	5,000	2,200	3,400	3,300	2,600
Redhaven .....	17,000	7,400	14,700	13,300	14,500	15,700	20,200	23,500
Redkist .....	1,500	1,000	0	200	1,100	1,700	300	600
Redskin .....	2,400	1,400	2,700	3,900	5,300	5,400	4,700	11,700
Suncrest .....	400	2,300	2,100	1,400	900	3,300	1,400	600
Other .....	10,000	4,500	7,000	7,200	5,200	7,700	3,400	1,800
Unknown .....	3,000	4,000	2,900	700	400	600	1,500	1,100
<b>STATE</b>	<b>77,000</b>	<b>60,600</b>	<b>60,300</b>	<b>70,200</b>	<b>58,000</b>	<b>67,800</b>	<b>66,000</b>	<b>71,000</b>

**Table 41. PEACH ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	64	58	130	88	4	16	850
Bellaire .....	6	1	9	1	0	0	170
Canadian Harmony	95	43	180	44	2	0	710
Cresthaven .....	32	41	88	54	6	2	480
Fayette .....	16	6	7	5	0	0	120
Garnet Beauty .....	16	24	43	22	16	9	180
Glohaven .....	19	25	86	46	5	18	380
Jayhaven .....	14	30	36	7	0	0	130
Loring .....	58	30	70	13	3	6	450
Newhaven .....	29	13	26	8	0	1	260
Redhaven .....	240	320	1,020	310	99	56	3,000
Redkist .....	38	56	127	38	8	5	130
Redskin .....	56	37	130	48	3	18	570
Suncrest .....	6	9	20	0	0	0	110
Other .....	38	26	97	19	3	7	510
Unknown .....	24	29	85	18	2	5	250
<b>STATE</b> .....	<b>720</b>	<b>710</b>	<b>2,070</b>	<b>700</b>	<b>140</b>	<b>140</b>	<b>8,290</b>

**Table 42. PEACH TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Babygold .....	7,300	7,400	17,300	9,000	400	1,500	106,000
Bellaire .....	900	100	1,200	100	0	0	23,800
Canadian Harmony	13,200	5,400	22,900	5,500	300	0	99,900
Cresthaven .....	4,300	6,000	11,400	6,100	800	200	63,200
Fayette .....	2,900	900	1,000	900	0	0	19,300
Garnet Beauty .....	1,900	3,100	6,600	2,600	2,100	900	23,600
Glohaven .....	2,200	3,400	10,800	4,900	600	2,300	50,000
Jayhaven .....	1,900	4,700	4,600	700	0	0	17,600
Loring .....	7,600	3,600	8,200	1,500	600	600	59,300
Newhaven .....	4,400	2,000	3,800	1,100	0	100	37,900
Redhaven .....	29,900	41,800	135,000	36,200	11,900	6,600	388,000
Redkist .....	800	2,000	5,800	1,800	0	0	16,800
Redskin .....	7,400	4,600	17,400	6,100	400	1,500	74,900
Suncrest .....	700	1,600	2,700	0	0	0	17,400
Other .....	4,800	3,000	12,400	2,300	600	400	70,300
Unknown .....	3,300	3,900	10,200	2,100	200	500	34,400
<b>STATE</b> .....	<b>93,500</b>	<b>93,500</b>	<b>271,000</b>	<b>80,900</b>	<b>17,900</b>	<b>14,600</b>	<b>1,100,000</b>

# PRUNES AND PLUMS

The acres of plum tree plummeted by one-third since 1986, and the number of commercial operations growing plums dropped from 540 to 417. The major varieties were Stanley, Damson, and Blufre. These constituted 95 percent of the 300 thousand trees. Plums are more geographically dispersed than the other fruits grown in Michigan. The Northwest, West Central and Southwest District each have about one-third of the 2,600 acres.

**Table 43. OTHER PRUNE AND PLUM VARIETIES**

VARIETY	Acres	Trees
Italian .....	7	900
Methley .....	8	1,200
Ozark Premier .....	10	1,300
Shiro .....	8	1,100
Valor .....	11	1,500
Burbank .....	3	300
Dunkelburg .....	3	300
Empress .....	2	200
Santa Rosa .....	4	500
All Others .....	31	4,800
<b>TOTAL</b>	<b>87</b>	<b>12,100</b>

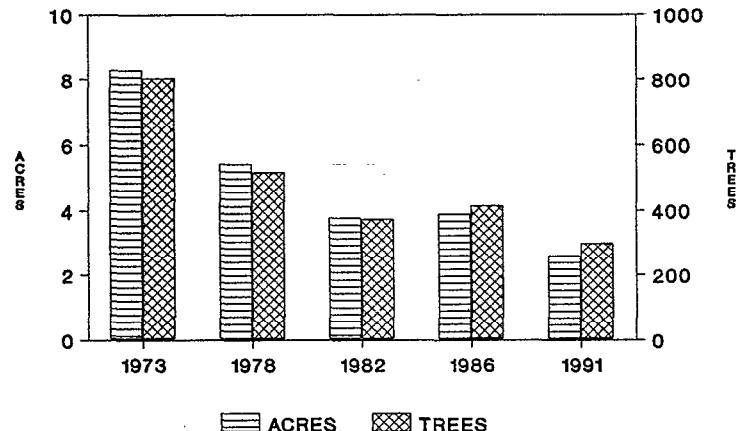
**Table 44. PRUNE AND PLUM ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Grand Traverse ....	0	6	18	4	15	9	10	8
Leelanau .....	1	0	0	9	0	6	21	21
Others .....	0	0	1	0	1	31	0	0
<b>NORTHWEST</b>	<b>6</b>	<b>18</b>	<b>13</b>	<b>16</b>	<b>46</b>	<b>31</b>	<b>31</b>	<b>29</b>
Kent .....	1	0	4	5	12	5	15	15
Mason .....	1	0	12	0	2	6	3	33
Oceana .....	14	0	8	2	22	14	15	55
Others .....	0	2	5	3	1	29	1	3
<b>WEST CENTRAL</b>	<b>15</b>	<b>2</b>	<b>28</b>	<b>10</b>	<b>37</b>	<b>54</b>	<b>35</b>	<b>110</b>
Allegan .....	10	2	7	4	0	1	15	6
Berrien .....	6	0	1	6	25	48	27	53
Van Buren .....	7	0	5	23	13	37	76	28
Others .....	0	0	0	0	8	14	0	3
<b>SOUTHWEST</b>	<b>22</b>	<b>2</b>	<b>12</b>	<b>33</b>	<b>46</b>	<b>100</b>	<b>120</b>	<b>90</b>
EAST .....	1	1	1	5	2	3	1	3
<b>STATE</b>	<b>40</b>	<b>11</b>	<b>59</b>	<b>61</b>	<b>100</b>	<b>200</b>	<b>190</b>	<b>230</b>

**Table 45. PRUNE AND PLUM TREES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Grand Traverse ....	0	700	2,200	600	1,700	1,900	1,100	1,000
Leelanau .....	100	0	0	1,400	0	500	1,700	2,800
Others .....	0	0	100	0	100	3,300	0	0
<b>NORTHWEST</b>	<b>100</b>	<b>700</b>	<b>2,300</b>	<b>2,000</b>	<b>1,800</b>	<b>5,700</b>	<b>2,800</b>	<b>3,800</b>
Kent .....	600	0	600	300	1,200	600	2,100	2,200
Mason .....	100	0	1,200	0	100	1,100	400	3,400
Oceana .....	1,700	0	900	200	2,300	1,900	1,700	6,500
Others .....	0	300	300	300	200	3,200	200	300
<b>WEST CENTRAL</b>	<b>2,400</b>	<b>300</b>	<b>3,000</b>	<b>800</b>	<b>3,800</b>	<b>6,800</b>	<b>4,400</b>	<b>12,400</b>
Allegan .....	1,200	200	700	400	0	200	1,800	900
Berrien .....	600	0	100	600	3,100	6,600	3,100	7,900
Van Buren .....	700	0	600	3,500	1,600	5,700	10,500	3,600
Others .....	0	0	0	0	1,200	1,500	0	300
<b>SOUTHWEST</b>	<b>2,500</b>	<b>200</b>	<b>1,400</b>	<b>4,500</b>	<b>5,900</b>	<b>14,000</b>	<b>15,400</b>	<b>12,700</b>
EAST .....	100	100	100	1,100	200	500	100	300
<b>STATE</b>	<b>5,100</b>	<b>1,300</b>	<b>6,800</b>	<b>8,400</b>	<b>11,700</b>	<b>27,000</b>	<b>22,700</b>	<b>29,200</b>

**MICHIGAN PLUMS**  
**ACRES AND TREES**  
 (Thousands)



**Table 44.** PRUNE AND PLUM ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Grand Traverse ....	7	13	99	50	10	6	250
Leelanau ....	5	39	120	46	13	44	330
Others ....	0	9	27	43	5	21	140
<b>NORTHWEST</b> ....	<b>12</b>	<b>61</b>	<b>250</b>	<b>140</b>	<b>28</b>	<b>71</b>	<b>720</b>
Kent ....	39	7	24	0	4	5	140
Mason ....	3	60	48	5	12	22	210
Oceana ....	7	49	150	60	36	21	450
Others ....	5	4	31	48	3	13	150
<b>WEST CENTRAL</b> ....	<b>54</b>	<b>120</b>	<b>250</b>	<b>110</b>	<b>55</b>	<b>61</b>	<b>940</b>
Allegan ....	3	2	22	4	21	18	110
Berrien ....	9	28	55	28	12	16	310
Van Buren ....	27	14	99	16	23	28	400
Others ....	13	3	34	0	0	0	75
<b>SOUTHWEST</b> ....	<b>51</b>	<b>48</b>	<b>210</b>	<b>48</b>	<b>55</b>	<b>62</b>	<b>900</b>
<b>EAST</b> ....	<b>5</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>1</b>	<b>8</b>	<b>49</b>
<b>STATE</b> ....	<b>120</b>	<b>230</b>	<b>720</b>	<b>300</b>	<b>140</b>	<b>200</b>	<b>2,600</b>

**Table 45.** PRUNE AND PLUM TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

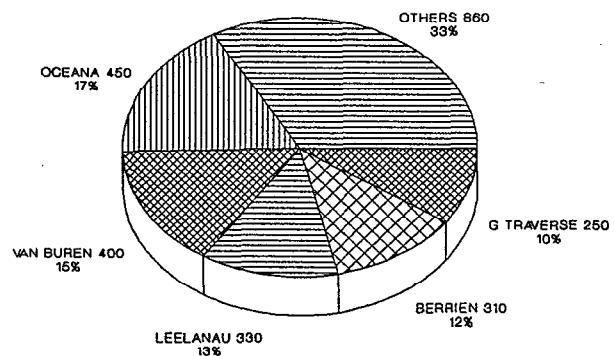
COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Grand Traverse ....	1,000	1,300	10,600	5,400	1,300	700	29,500
Leelanau ....	500	4,200	13,400	5,100	1,400	4,500	35,600
Others ....	0	1,400	3,200	4,300	400	2,100	14,900
<b>NORTHWEST</b> ....	<b>1,500</b>	<b>6,900</b>	<b>27,200</b>	<b>14,800</b>	<b>3,100</b>	<b>7,300</b>	<b>80,000</b>
Kent ....	4,400	800	2,900	0	500	800	17,000
Mason ....	400	6,600	5,000	700	1,300	2,300	22,600
Oceana ....	800	5,400	17,200	7,400	3,900	1,800	51,700
Others ....	400	600	3,500	4,800	300	900	15,300
<b>WEST CENTRAL</b> ....	<b>6,000</b>	<b>13,400</b>	<b>28,600</b>	<b>12,900</b>	<b>6,000</b>	<b>5,800</b>	<b>107,000</b>
Allegan ....	300	200	2,200	400	2,100	1,800	12,400
Berrien ....	1,100	3,300	7,300	3,100	1,200	1,300	39,300
Van Buren ....	3,200	1,600	10,600	1,700	2,100	2,700	48,100
Others ....	1,400	400	3,700	0	0	0	8,500
<b>SOUTHWEST</b> ....	<b>6,000</b>	<b>5,500</b>	<b>23,800</b>	<b>5,200</b>	<b>5,400</b>	<b>5,800</b>	<b>108,000</b>
<b>EAST</b> ....	<b>500</b>	<b>200</b>	<b>1,000</b>	<b>500</b>	<b>100</b>	<b>800</b>	<b>5,600</b>
<b>STATE</b> ....	<b>14,000</b>	<b>26,000</b>	<b>80,600</b>	<b>33,400</b>	<b>14,600</b>	<b>19,700</b>	<b>300,000</b>

**Table 46.****PRUNE AND PLUM ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Stanley .....	1	2	15	11	9	34	24	28
Blufre .....	0	0	0	0	0	0	0	0
Damson .....	0	2	0	1	6	12	4	0
Other .....	0	0	3	1	0	0	3	0
Unknown .....	0	2	1	0	0	0	0	0
<b>NORTHWEST</b>	<b>1</b>	<b>4</b>	<b>18</b>	<b>13</b>	<b>16</b>	<b>46</b>	<b>31</b>	<b>29</b>
Stanley .....	14	2	28	9	22	52	35	110
Blufre .....	0	0	0	0	0	0	0	1
Damson .....	0	0	0	0	15	0	0	0
Other .....	1	0	0	1	0	2	0	0
Unknown .....	0	0	0	0	0	0	0	0
<b>WEST CENTRAL</b>	<b>15</b>	<b>2</b>	<b>28</b>	<b>10</b>	<b>37</b>	<b>54</b>	<b>35</b>	<b>110</b>
Stanley .....	22	2	11	26	29	97	94	76
Blufre .....	0	0	0	0	6	1	0	2
Damson .....	0	0	0	0	1	0	11	0
Other .....	1	0	1	7	10	1	13	11
Unknown .....	0	0	1	0	0	1	0	0
<b>SOUTHWEST</b>	<b>23</b>	<b>2</b>	<b>11</b>	<b>33</b>	<b>46</b>	<b>99</b>	<b>120</b>	<b>89</b>

**Table 47.****PRUNE AND PLUM TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Stanley .....	100	200	1,800	1,700	1,000	4,300	2,000	3,700
Blufre .....	0	0	0	0	0	0	0	0
Damson .....	0	300	0	100	800	1,400	400	100
Other .....	0	0	300	200	0	0	400	0
Unknown .....	0	200	200	0	0	0	0	0
<b>NORTHWEST</b>	<b>100</b>	<b>700</b>	<b>2,300</b>	<b>2,000</b>	<b>1,800</b>	<b>5,700</b>	<b>2,800</b>	<b>3,800</b>
Stanley .....	1,800	300	3,000	700	2,300	6,300	4,200	12,200
Blufre .....	0	0	0	0	0	0	0	200
Damson .....	0	0	0	0	1,500	0	0	0
Other .....	600	0	0	100	0	500	0	0
Unknown .....	0	0	0	0	0	0	0	0
<b>WEST CENTRAL</b>	<b>2,400</b>	<b>300</b>	<b>3,000</b>	<b>800</b>	<b>3,800</b>	<b>6,800</b>	<b>4,200</b>	<b>12,400</b>
Stanley .....	2,400	200	1,200	3,800	3,900	13,700	11,600	10,400
Blufre .....	0	0	0	0	700	100	0	300
Damson .....	0	0	0	0	0	0	2,000	0
Other .....	100	0	100	700	1,300	100	1,800	1,900
Unknown .....	0	0	100	0	0	100	0	100
<b>SOUTHWEST</b>	<b>2,500</b>	<b>200</b>	<b>1,400</b>	<b>4,500</b>	<b>5,900</b>	<b>14,000</b>	<b>15,400</b>	<b>12,700</b>

**TOP PLUM COUNTIES  
ACRES AND PERCENTS**

**Table 46.** PRUNE AND PLUM ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Stanley .....	12	51	200	120	17	46	570
Blufre .....	0	4	3	1	2	3	12
Damson .....	0	0	36	19	10	17	110
Other .....	0	0	3	0	0	0	11
Unknown .....	0	4	5	0	0	5	17
<b>NORTHWEST</b> .....	<b>12</b>	<b>55</b>	<b>250</b>	<b>140</b>	<b>29</b>	<b>71</b>	<b>720</b>
Stanley .....	48	110	240	110	34	48	860
Blufre .....	0	1	3	0	6	4	14
Damson .....	0	4	4	4	15	7	49
Other .....	1	0	0	0	0	1	7
Unknown .....	5	3	5	0	0	1	13
<b>WEST CENTRAL</b> .....	<b>54</b>	<b>120</b>	<b>250</b>	<b>110</b>	<b>55</b>	<b>60</b>	<b>940</b>
Stanley .....	45	42	180	42	42	48	760
Blufre .....	2	2	12	2	9	5	40
Damson .....	1	0	4	4	1	2	23
Other .....	3	3	5	0	1	1	56
Unknown .....	1	0	12	0	2	7	23
<b>SOUTHWEST</b> .....	<b>51</b>	<b>47</b>	<b>210</b>	<b>48</b>	<b>53</b>	<b>55</b>	<b>900</b>

**Table 47.** PRUNE AND PLUM TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued

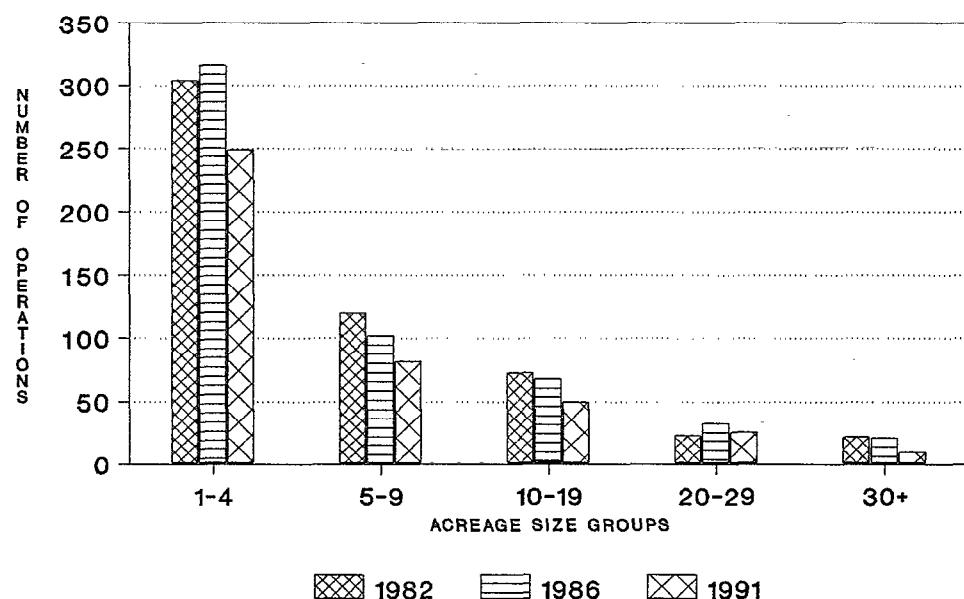
VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Stanley .....	1,500	5,700	22,400	12,500	2,000	5,000	63,900
Blufre .....	0	600	300	0	200	300	1,400
Damson .....	0	0	3,600	2,300	900	1,500	11,400
Other .....	0	0	400	0	0	0	1,300
Unknown .....	0	500	500	0	0	500	1,900
<b>NORTHWEST</b> .....	<b>1,500</b>	<b>6,800</b>	<b>27,200</b>	<b>14,800</b>	<b>3,100</b>	<b>7,300</b>	<b>79,900</b>
Stanley .....	5,400	12,600	27,500	12,500	3,800	4,200	96,800
Blufre .....	0	100	300	0	700	700	2,000
Damson .....	0	500	400	400	1,500	700	5,000
Other .....	200	0	0	0	0	100	1,500
Unknown .....	400	200	400	0	0	100	1,100
<b>WEST CENTRAL</b> .....	<b>6,000</b>	<b>13,400</b>	<b>28,600</b>	<b>12,900</b>	<b>6,000</b>	<b>5,800</b>	<b>106,000</b>
Stanley .....	5,400	5,000	20,200	4,700	4,200	4,600	91,300
Blufre .....	200	200	1,400	100	800	400	4,200
Damson .....	0	0	300	400	100	200	3,000
Other .....	300	300	700	0	100	100	7,500
Unknown .....	100	0	1,200	0	200	500	2,300
<b>SOUTHWEST</b> .....	<b>6,000</b>	<b>5,500</b>	<b>23,800</b>	<b>5,200</b>	<b>5,400</b>	<b>5,800</b>	<b>108,000</b>

**Table 46.****PRUNE AND PLUM ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Stanley .....	1	0	0	2	1	2	0	2
Blufre .....	0	0	0	1	0	0	0	0
Damson .....	0	0	0	0	0	0	0	0
Other .....	0	1	1	2	1	1	0	0
Unknown .....	0	0	0	0	0	0	1	1
EAST .....	1	1	1	5	2	3	1	3
Stanley .....	38	6	54	48	61	180	160	220
Blufre .....	0	0	0	1	7	1	0	2
Damson .....	0	2	0	1	21	12	15	1
Other .....	2	1	4	11	11	4	17	12
Unknown .....	0	2	2	0	0	1	1	1
STATE .....	41	10	59	61	100	200	190	230

**Table 47.****PRUNE AND PLUM TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Stanley .....	0	0	0	300	100	300	0	200
Blufre .....	0	0	0	200	0	0	0	0
Damson .....	0	0	0	0	0	0	0	0
Other .....	100	100	0	600	100	200	100	100
Unknown .....	0	0	100	0	0	0	0	0
EAST .....	100	100	100	1,100	200	500	100	300
Stanley .....	4,300	700	6,000	6,500	7,300	24,600	17,800	26,500
Blufre .....	0	0	0	200	700	100	0	500
Damson .....	0	300	0	100	2,300	1,400	2,400	100
Other .....	800	100	400	1,600	1,400	800	2,300	2,000
Unknown .....	0	200	400	0	0	100	0	100
STATE .....	5,100	1,300	6,800	8,400	11,700	27,000	22,500	29,200

**MICHIGAN PLUM  
OPERATIONS BY ACREAGE SIZE GROUP**

**Table 46. PRUNE AND PLUM ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Stanley .....	1	1	5	5	1	5	26
Blufre .....	1	1	0	1	0	1	5
Damson .....	0	0	1	0	0	0	1
Other .....	3	1	1	0	0	1	13
Unknown .....	0	0	2	0	0	1	5
<b>EAST</b> .....	<b>5</b>	<b>3</b>	<b>7</b>	<b>6</b>	<b>1</b>	<b>7</b>	<b>49</b>
Stanley .....	100	210	630	270	94	150	2,220
Blufre .....	3	7	17	3	17	12	70
Damson .....	1	4	44	27	25	26	180
Other .....	7	4	9	0	1	3	87
Unknown .....	6	7	23	0	2	14	58
<b>STATE</b> .....	<b>120</b>	<b>230</b>	<b>720</b>	<b>300</b>	<b>140</b>	<b>200</b>	<b>2,600</b>

**Table 47. PRUNE AND PLUM TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Stanley .....	100	100	700	500	100	500	2,900
Blufre .....	100	100	0	0	0	100	500
Damson .....	0	0	100	0	0	0	100
Other .....	300	0	100	0	0	100	1,800
Unknown .....	0	0	100	0	0	100	300
<b>EAST</b> .....	<b>500</b>	<b>200</b>	<b>1,000</b>	<b>500</b>	<b>100</b>	<b>800</b>	<b>5,600</b>
Stanley .....	12,400	23,400	70,800	30,200	10,100	14,300	255,000
Blufre .....	300	1,000	2,000	100	1,700	1,500	8,100
Damson .....	0	500	4,400	3,100	2,500	2,400	19,500
Other .....	800	300	1,200	0	100	300	12,100
Unknown .....	500	700	2,200	0	200	1,200	5,600
<b>STATE</b> .....	<b>14,000</b>	<b>25,900</b>	<b>80,600</b>	<b>33,400</b>	<b>14,600</b>	<b>19,700</b>	<b>300,000</b>

**Table 48. PRUNE AND PLUM OPERATIONS AND ACRES BY SIZE GROUPS**

OPERATIONS AND ACRES	Acreage Size Groups							TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	
1991 Operations ....	249	82	50	26	8	2	0	417
Acres .....	400	500	670	600	300	130	0	2,600
1986 Operations ....	316	102	68	33	15	5	1	540
Acres .....	530	670	840	810	610	320	120	3,900
1982 Operations ....	304	120	73	23	15	6	1	542
Acres .....	532	745	923	526	570	362	136	3,794

# PEARS

The acres in pears dropped 24 percent from 1986, and the number of commercial operations growing pears fell from 397 to 315.

Over 80 percent of the 137 thousand pear trees were Bartlett; another 11 percent were Bosc. The top pear counties were Allegan and Berrien. They had 18 percent and 14 percent of the 1,300 total acres, respectively.

## OTHER PEAR VARIETIES

Table 49.

VARIETY	Acres	Trees
Asians .....	13	2,500
Clapp's .....	39	3,800
D'Anjou .....	7	800
Kieffer .....	6	500
Spartlett .....	9	1,200
All Others .....	10	600
<b>TOTAL</b>	<b>84</b>	<b>9,400</b>

Table 50.

## PEAR ACRES BY YEAR PLANTED, COUNTY AND DISTRICT

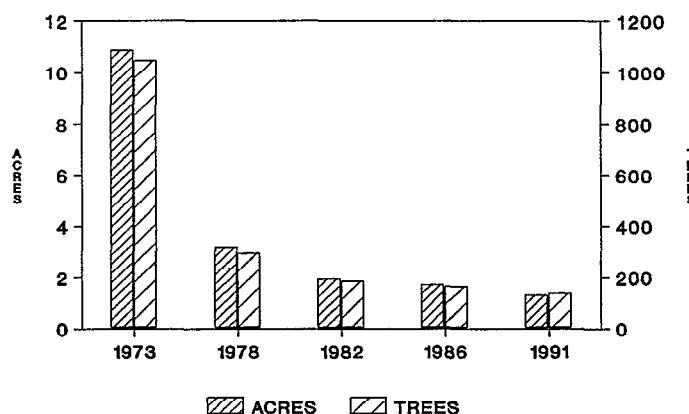
COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	2	2	8	0	0	0	1	0
WEST CENTRAL .....	4	0	1	5	1	1	0	19
Allegan .....	0	0	1	0	1	0	4	2
Berrien .....	0	4	8	3	14	3	2	5
Others .....	0	0	2	0	1	0	3	3
SOUTHWEST .....	0	4	10	3	16	3	9	10
EAST .....	0	2	0	1	4	5	1	3
STATE .....	6	8	19	10	21	9	11	32

Table 51.

## PEAR TREES BY YEAR PLANTED, COUNTY AND DISTRICT

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	200	300	800	0	0	100	100	0
WEST CENTRAL .....	400	0	100	1,100	100	100	0	2,300
Allegan .....	0	0	100	0	0	0	400	200
Berrien .....	0	800	900	300	1,600	400	300	500
Others .....	0	0	200	0	300	0	300	200
SOUTHWEST .....	0	800	1,200	300	1,900	400	1,000	900
EAST .....	200	200	100	200	600	800	100	300
STATE .....	800	1,300	2,200	1,600	2,600	1,400	1,200	3,500

MICHIGAN PEARS  
ACRES AND TREES  
(Thousands)



**Table 50. PEAR ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST .....	0	2	31	12	35	100	190
WEST CENTRAL .....	3	0	18	7	72	240	370
Allegan .....	1	0	4	14	5	200	230
Berrien .....	3	3	3	1	14	120	180
Others .....	11	6	1	3	16	140	190
SOUTHWEST .....	14	9	8	18	35	460	600
EAST .....	4	2	19	8	11	82	140
STATE .....	21	13	75	45	150	880	1,300

**Table 51. PEAR TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST .....	0	200	2,900	1,100	3,400	9,400	18,500
WEST CENTRAL .....	700	0	2,100	500	10,000	26,200	43,600
Allegan .....	100	0	300	1,600	400	18,700	21,800
Berrien .....	300	400	300	100	1,500	12,500	19,900
Others .....	1,300	400	200	300	1,900	14,300	19,400
SOUTHWEST .....	1,700	800	800	2,000	3,800	45,500	61,100
EAST .....	500	100	2,000	800	1,100	6,700	13,700
STATE .....	2,900	1,100	7,800	4,400	18,300	87,800	137,000

**Table 52. PEAR OPERATIONS AND ACRES BY SIZE GROUPS**

OPERATIONS AND ACRES	Acreage Size Groups							TOTAL
	1-4	5-9	10-19	20-29	30-49	50-99	100-199	
1991 Operations ....	236	43	24	6	5	1	0	315
Acres .....	360	260	290	130	180	80	0	1,300
1986 Operations ....	290	59	37	5	5	1	0	397
Acres .....	490	360	490	110	170	80	0	1,700
1982 Operations ....	285	87	37	3	5	1	1	419
Acres .....	548	483	515	73	171	60	100	1,950

**Table 53.****PEAR ACRES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Bartlett .....	1	0	3	0	0	0	1	0
Bosc .....	0	2	3	0	0	0	0	0
Others .....	1	0	2	0	0	0	0	0
Unknown .....	0	0	0	0	0	0	0	0
<b>NORTHWEST</b>	<b>2</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
Bartlett .....	2	0	0	0	1	0	0	8
Bosc .....	1	0	0	0	0	0	0	8
Others .....	1	0	1	6	1	0	0	0
Unknown .....	0	0	0	0	0	1	0	4
<b>WEST CENTRAL</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>19</b>
Bartlett .....	0	1	7	2	9	2	2	7
Bosc .....	0	1	1	1	6	1	4	2
Others .....	0	2	3	0	1	0	3	2
Unknown .....	0	0	0	0	0	0	1	0
<b>SOUTHWEST</b>	<b>0</b>	<b>4</b>	<b>11</b>	<b>3</b>	<b>16</b>	<b>3</b>	<b>9</b>	<b>10</b>
Bartlett .....	0	0	0	0	1	1	1	3
Bosc .....	0	0	0	0	1	1	0	0
Others .....	0	2	0	1	1	1	0	0
Unknown .....	0	0	0	0	0	2	0	0
<b>EAST</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>3</b>
Bartlett .....	3	1	10	2	11	4	3	16
Bosc .....	1	3	4	1	6	2	4	10
Others .....	2	4	5	7	3	1	3	2
Unknown .....	0	0	0	0	0	3	1	4
<b>STATE</b>	<b>6</b>	<b>8</b>	<b>19</b>	<b>10</b>	<b>21</b>	<b>9</b>	<b>11</b>	<b>32</b>

**Table 54.****PEAR TREES BY YEAR PLANTED, VARIETY AND DISTRICT**

VARIETY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
Bartlett .....	100	100	300	0	0	0	100	0
Bosc .....	0	200	300	0	0	0	0	0
Other .....	100	0	200	0	0	0	0	0
Unknown .....	0	0	0	0	0	100	0	0
<b>NORTHWEST</b>	<b>200</b>	<b>300</b>	<b>800</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>
Bartlett .....	200	0	0	0	100	0	0	1,000
Bosc .....	100	0	0	0	0	0	0	900
Other .....	100	0	100	1,100	100	0	0	0
Unknown .....	0	0	0	0	0	100	0	400
<b>WEST CENTRAL</b>	<b>400</b>	<b>0</b>	<b>100</b>	<b>1,100</b>	<b>200</b>	<b>100</b>	<b>0</b>	<b>2,300</b>
Bartlett .....	0	100	800	200	1,000	300	200	600
Bosc .....	0	100	100	100	700	100	400	200
Other .....	0	600	300	0	200	0	300	100
Unknown .....	0	0	0	0	0	0	100	0
<b>SOUTHWEST</b>	<b>0</b>	<b>800</b>	<b>1,200</b>	<b>300</b>	<b>1,900</b>	<b>400</b>	<b>1,000</b>	<b>900</b>
Bartlett .....	0	0	0	0	100	100	100	300
Bosc .....	0	0	0	0	100	100	0	0
Other .....	0	200	0	100	100	100	0	0
Unknown .....	0	0	0	0	0	200	0	0
<b>EAST</b>	<b>0</b>	<b>200</b>	<b>0</b>	<b>100</b>	<b>300</b>	<b>500</b>	<b>100</b>	<b>300</b>
Bartlett .....	300	200	1,100	200	1,200	400	400	1,900
Bosc .....	100	300	400	100	800	200	400	1,100
Other .....	200	800	600	1,200	400	100	300	100
Unknown .....	0	0	0	0	0	400	100	400
<b>STATE</b>	<b>600</b>	<b>1,300</b>	<b>2,100</b>	<b>1,500</b>	<b>2,400</b>	<b>1,100</b>	<b>1,200</b>	<b>3,500</b>

**Table 53. PEAR ACRES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Bartlett .....	0	2	26	11	33	94	170
Bosc .....	0	0	2	1	1	5	14
Others .....	0	0	2	1	2	2	10
Unknown .....	0	0	1	0	0	0	1
<b>NORTHWEST</b>	<b>0</b>	<b>2</b>	<b>31</b>	<b>12</b>	<b>35</b>	<b>100</b>	<b>190</b>
Bartlett .....	2	0	15	5	59	230	320
Bosc .....	0	0	1	3	7	12	32
Others .....	0	0	2	0	5	4	19
Unknown .....	0	0	1	0	0	0	6
<b>WEST CENTRAL</b>	<b>3</b>	<b>0</b>	<b>18</b>	<b>7</b>	<b>72</b>	<b>250</b>	<b>380</b>
Bartlett .....	4	6	4	16	27	380	470
Bosc .....	2	0	3	2	6	51	79
Others .....	6	1	0	0	2	21	40
Unknown .....	3	2	1	0	0	5	12
<b>SOUTHWEST</b>	<b>14</b>	<b>9</b>	<b>8</b>	<b>18</b>	<b>35</b>	<b>460</b>	<b>600</b>
Bartlett .....	2	1	10	6	7	61	92
Bosc .....	1	1	2	2	2	11	21
Others .....	0	1	6	1	1	3	15
Unknown .....	0	0	1	1	0	2	6
<b>EAST</b>	<b>4</b>	<b>2</b>	<b>19</b>	<b>8</b>	<b>11</b>	<b>77</b>	<b>130</b>
<b>STATE</b>	<b>21</b>	<b>13</b>	<b>75</b>	<b>45</b>	<b>150</b>	<b>880</b>	<b>1,300</b>

**Table 54. PEAR TREES BY YEAR PLANTED, VARIETY AND DISTRICT—Continued**

VARIETY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Bartlett .....	0	200	2,300	900	3,200	8,700	15,900
Bosc .....	0	0	300	100	100	500	1,500
Other .....	0	0	200	100	100	200	900
Unknown .....	0	0	100	0	0	0	200
<b>NORTHWEST</b>	<b>0</b>	<b>200</b>	<b>2,900</b>	<b>1,100</b>	<b>3,400</b>	<b>9,400</b>	<b>18,500</b>
Bartlett .....	700	0	1,600	400	8,900	25,200	38,100
Bosc .....	0	0	100	200	600	1,300	3,200
Other .....	0	0	200	0	500	500	2,600
Unknown .....	0	0	200	0	0	0	700
<b>WEST CENTRAL</b>	<b>700</b>	<b>0</b>	<b>2,100</b>	<b>600</b>	<b>10,000</b>	<b>27,000</b>	<b>44,600</b>
Bartlett .....	400	600	400	1,800	3,000	38,200	47,600
Bosc .....	200	0	300	200	600	5,100	8,100
Other .....	700	100	0	0	200	1,700	4,200
Unknown .....	400	100	100	0	0	500	1,200
<b>SOUTHWEST</b>	<b>1,700</b>	<b>800</b>	<b>800</b>	<b>2,000</b>	<b>3,800</b>	<b>45,500</b>	<b>61,100</b>
Bartlett .....	300	100	900	500	700	5,100	8,200
Bosc .....	100	100	200	200	200	900	1,900
Other .....	0	100	700	100	100	200	1,700
Unknown .....	0	0	100	100	0	100	500
<b>EAST</b>	<b>400</b>	<b>300</b>	<b>1,900</b>	<b>900</b>	<b>1,000</b>	<b>6,300</b>	<b>12,300</b>
<b>STATE</b>	<b>1,400</b>	<b>900</b>	<b>5,200</b>	<b>3,600</b>	<b>15,800</b>	<b>77,200</b>	<b>110,000</b>
Bartlett .....	300	100	900	700	1,500	7,800	14,700
Bosc .....	700	200	1,100	200	900	2,600	9,400
Other .....	400	100	500	100	0	600	2,600
<b>STATE</b>	<b>2,800</b>	<b>1,300</b>	<b>7,700</b>	<b>4,600</b>	<b>18,200</b>	<b>88,200</b>	<b>137,000</b>

# NECTARINES

The acres of nectarines leaped by nearly 50 percent, and the count of operations growing the fruit rose from 107 to 127. Over half the 260 acres were in Berrien County. The two most prevalent varieties were Fantasia and Red Gold; they accounted for over 60 percent of the 42,900 trees.

**Table 55. NECTARINE ACRES AND TREES BY VARIETY**

VARIETY	Acres	Trees
Fantasia .....	89	14,900
Harko .....	10	1,400
Juneglo .....	7	800
Red Gold .....	66	11,900
Flavor Top .....	6	800
Summer Beauty ...	5	800
Sunglo .....	20	3,800
Other .....	25	4,700
Unknown .....	32	3,800
<b>STATE .....</b>	<b>260</b>	<b>42,900</b>

**Table 56.**

**NECTARINE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	4	1	0	0	0	0	2	0
WEST CENTRAL .....	4	13	2	5	5	1	2	1
Berrien .....	1	57	9	16	11	7	6	13
Others .....	0	2	4	3	17	2	1	16
SOUTHWEST .....	1	59	13	19	28	8	7	29
EAST .....	0	0	0	1	0	1	0	1
<b>STATE .....</b>	<b>8</b>	<b>73</b>	<b>16</b>	<b>25</b>	<b>32</b>	<b>10</b>	<b>11</b>	<b>30</b>

**Table 57.**

**NECTARINE TREES BY YEAR PLANTED, COUNTY AND DISTRICT**

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	400	100	0	0	0	0	200	0
WEST CENTRAL .....	600	2,000	300	600	500	0	300	100
Berrien .....	200	13,100	1,100	2,400	1,300	800	700	2,200
Others .....	0	200	500	400	4,000	200	100	2,200
SOUTHWEST .....	200	13,300	1,600	2,800	5,300	1,000	800	4,400
EAST .....	0	0	100	200	0	100	0	100
<b>STATE .....</b>	<b>1,200</b>	<b>15,400</b>	<b>2,000</b>	<b>3,600</b>	<b>5,800</b>	<b>1,100</b>	<b>1,300</b>	<b>4,600</b>

**Table 56.** NECTARINE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST .....	0	1	1	0	0	0	9
WEST CENTRAL .....	14	1	4	1	0	0	52
Berrien .....	1	5	13	1	0	0	140
Others .....	2	2	3	2	3	0	56
SOUTHWEST .....	3	7	15	3	4	0	200
EAST .....	0	0	0	0	0	0	4
STATE .....	17	9	21	4	4	0	260

**Table 57.** NECTARINE TREES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST .....	100	100	100	0	0	0	1,000
WEST CENTRAL .....	2,100	100	600	100	0	0	7,300
Berrien .....	300	500	2,200	100	0	0	24,900
Others .....	200	200	400	300	400	0	9,100
SOUTHWEST .....	500	700	2,600	400	400	0	34,000
EAST .....	0	100	0	0	0	0	600
STATE .....	2,700	1,000	3,300	500	400	0	42,900

**Table 58.** NECTARINE OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups					TOTAL
	1-4	5-9	10-19	20-29	30-49	
1991 Operations .....	111	10	4	1	1	127
Acres .....	100	55	50	25	30	260
1986 Operations .....	99	5	2	1	0	107
Acres .....	100	30	25	20	0	175
1982 Operations .....	69	7	0	1	0	77
Acres .....	88	38	0	20	0	146

# APRICOTS

The acres of apricots declined 25 percent from 1986 to 180 acres, and the number of commercial operations growing the fruit fell from 147 to 125. Over half the 19 thousand apricot trees were Goldcot.

**APRICOT ACRES AND TREES BY VARIETY**

**Table 59.**

VARIETY	Acres	Trees
Goldcot .....	84	9,700
Harglow .....	10	1,300
Veecot .....	4	500
Other .....	42	2,700
Unknown .....	40	4,800
<b>STATE .....</b>	<b>180</b>	<b>19,000</b>

**Table 60.**

**APRICOT ACRES BY YEAR PLANTED AND DISTRICT**

DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	1	25	0	0	1	2	0	5
WEST CENTRAL .....	0	4	0	3	0	4	2	0
SOUTHWEST .....	0	1	1	3	6	1	2	13
EAST .....	0	0	0	0	0	1	0	0
<b>STATE .....</b>	<b>2</b>	<b>29</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>18</b>

**Table 61.**

**APRICOT TREES BY YEAR PLANTED AND DISTRICT**

DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	100	1,800	0	0	100	200	0	600
WEST CENTRAL .....	100	400	0	400	0	500	200	100
SOUTHWEST .....	0	100	100	300	600	100	200	1,600
EAST .....	0	0	0	0	0	100	0	0
<b>STATE .....</b>	<b>200</b>	<b>2,300</b>	<b>100</b>	<b>700</b>	<b>700</b>	<b>900</b>	<b>400</b>	<b>2,300</b>

**Table 60.** APRICOT ACRES BY YEAR PLANTED AND DISTRICT—Continued

DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST .....	23	9	12	9	1	8	96
WEST CENTRAL .....	3	0	1	5	5	2	31
SOUTHWEST .....	1	3	4	2	8	4	47
EAST .....	1	0	2	0	0	0	5
STATE .....	28	12	19	15	14	14	180

**Table 61.** APRICOT TREES BY YEAR PLANTED AND DISTRICT—Continued

DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST .....	2,600	1,300	1,700	1,000	100	600	10,000
WEST CENTRAL .....	500	0	100	600	500	100	3,500
SOUTHWEST .....	100	300	400	100	800	500	5,200
EAST .....	100	0	100	0	0	0	300
STATE .....	3,300	1,600	2,300	1,700	1,400	1,200	19,000

**Table 62.** APRICOT OPERATIONS AND ACRES BY SIZE GROUPS

OPERATIONS AND ACRES	Acreage Size Groups				
	1-4	5-9	10-19	20-29	TOTAL
1991 Operations .....	117	5	2	1	125
Acres .....	100	30	30	20	180
1986 Operations .....	133	10	4	0	147
Acres .....	140	55	45	0	240
1982 Operations .....	95	11	3	0	109
Acres .....	104	63	40	0	207

# BRAMBLES

Raspberries and blackberries have not been included on the fruit inventory since 1973. The 1991 survey detected 360 acres of red raspberries, 120 acres of black raspberries, 35 acres of purple raspberries and 25 acres of blackberries. Unlike every other type of fruit grown commercially in Michigan, the majority of brambles are grown in the Eastern fruit district, away from the Lake Michigan shore. Also atypical is the dominance of small growers. One hundred and seventy acres were on 124 operations of four acres or less, and 120 acres were on 20 operations of five to nine acres. The remaining 250 acres were grown by 11 operations of ten or more acres.

**Table 63.** OTHER BRAMBLE VARIETIES

VARIETY	Acres
Black Satin .....	5
Chester .....	5
Darrow .....	5
Hull .....	3
Thornfree .....	5
Chillowack .....	9
Brandywine .....	8
Royalty .....	8
Boyne .....	19
Lowden .....	10
Newburgh .....	4
Redwing .....	3
Titan .....	15
All Others .....	51
<b>TOTAL</b> .....	<b>150</b>

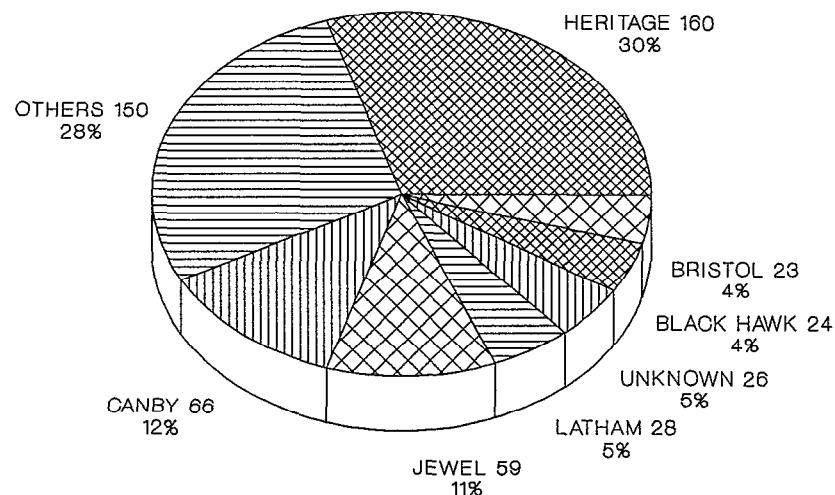
**Table 64.** BRAMBLE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT

COUNTY AND DISTRICT	1991	1990	1989	1988	1987	1986	1985	1984
NORTHWEST .....	5	4	2	4	2	1	2	3
WEST CENTRAL .....	1	2	1	7	1	4	2	4
Berrien .....	2	2	21	13	14	9	8	5
Others .....	2	2	1	0	1	5	4	7
SOUTHWEST .....	4	4	22	13	15	14	12	12
Jackson and Washtenaw .....	7	7	0	7	0	10	36	15
Livingston and Oakland .....	8	1	2	2	2	10	2	5
Others .....	4	28	10	7	8	11	6	19
EAST .....	19	36	12	16	10	31	44	39
<b>STATE</b> .....	<b>30</b>	<b>46</b>	<b>37</b>	<b>40</b>	<b>28</b>	<b>50</b>	<b>60</b>	<b>58</b>

**Table 65.** BRAMBLE ACRES BY YEAR PLANTED AND VARIETY

VARIETY	1991	1990	1989	1988	1987	1986	1985	1984
Black Hawk .....	0	0	0	0	0	5	12	2
Bristol .....	0	1	0	0	1	10	3	0
Canby .....	3	2	0	4	3	8	10	7
Heritage .....	10	20	8	6	3	12	7	27
Jewel .....	0	4	22	14	10	1	6	1
Latham .....	0	2	0	0	2	4	1	6
Others .....	15	16	5	16	8	10	17	15
Unknown .....	2	1	2	0	1	0	4	0
<b>STATE</b> .....	<b>30</b>	<b>46</b>	<b>37</b>	<b>40</b>	<b>28</b>	<b>50</b>	<b>60</b>	<b>58</b>

**BRAMBLE VARIETIES  
ACRES AND PERCENTS**



**Table 64.** BRAMBLE ACRES BY YEAR PLANTED, COUNTY AND DISTRICT—Continued

COUNTY AND DISTRICT	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
NORTHWEST . . . . .	0	4	5	0	0	0	32
WEST CENTRAL . . . . .	0	0	5	0	4	3	34
Berrien . . . . .	7	4	6	5	0	1	97
Others . . . . .	0	15	28	0	0	0	66
SOUTHWEST . . . . .	7	19	34	5	0	1	160
Jackson and Washtenaw . . . . .	0	0	5	0	0	0	87
Livingston and Oakland . . . . .	0	6	20	0	6	4	68
Others . . . . .	1	19	28	5	9	1	160
EAST . . . . .	·	1	25	53	5	15	310
<b>STATE . . . . .</b>	<b>8</b>	<b>48</b>	<b>97</b>	<b>10</b>	<b>19</b>	<b>9</b>	<b>540</b>

**Table 65.** BRAMBLE ACRES BY YEAR PLANTED AND VARIETY—Continued

VARIETY	1983	1982	1977-81	1972-76	1967-71	Before 1967	All
Black Hawk . . . . .	1	0	0	4	0	0	24
Bristol . . . . .	7	0	0	0	0	1	23
Canby . . . . .	0	6	15	0	4	4	66
Heritage . . . . .	0	9	60	0	2	0	160
Jewel . . . . .	0	1	0	0	0	0	59
Latham . . . . .	0	5	5	1	0	1	28
Others . . . . .	0	27	8	5	9	0	150
Unknown . . . . .	0	0	9	0	4	3	26
<b>STATE . . . . .</b>	<b>8</b>	<b>48</b>	<b>97</b>	<b>10</b>	<b>19</b>	<b>9</b>	<b>540</b>

# METHODS

The list sampling frame maintained by the Michigan Agricultural Statistics Service was the primary source of names of commercial fruit operations. **Commercial** meant any operation having at least one acre of any of the eleven fruits on the survey. (The exception was brambles, for which one-tenth of an acre sufficed.) Data for all fruit was collected for every qualifying operation. **Operations** included fruit farms managed by individuals, partnerships, and by family and other type corporations.

Questionnaires and cover letters were mailed to all fruit operations on the list frame after the 1991 fruit harvest. Operations with one hundred or more acres of any one fruit type were sent only a cover letter informing them that a NASDA enumerator would be contacting them to collect the requested data. Operators who responded to the 1986 Michigan Fruit & Vineyard Survey were provided with a printout of their responses to that inventory. Data collection continued until the spring of 1992.

**Table 66. PERCENT OF ACREAGE COMPLETED BY COUNTY AND FRUIT**

DISTRICT	County	Apples	Tart Cherries	Sweet Cherries	Blueberries	Grapes	Peaches
NORTHWEST	Antrim .....		96.4	92.3			
	Benzie .....	81.0	82.6	81.5			
	Grand Traverse ....	98.2	87.9	88.3			
	Leelanau .....	82.9	86.6	84.5			80.8
	Manistee .....	75.1	78.1	93.3			68.6
	Others .....	83.0			45.7	100.0	76.1
WEST CENTRAL	Ionia .....	97.0					
	Kent .....	91.4	100.0				97.2
	Mason .....	95.6	93.5	96.1			100.0
	Montcalm .....	100.0					
	Muskegon .....	70.4	100.0		91.2		71.5
	Newaygo .....	92.2	100.0		100.0		100.0
	Oceana .....	71.5	72.0	73.6			81.1
	Ottawa .....	92.2			97.4		92.4
	Others .....		100.0	95.8	100.0	100.0	100.0
SOUTHWEST	Allegan .....	98.2	100.0		93.5		
	Berrien .....	85.8	85.1	93.3	98.3	92.3	87.3
	Cass .....		91.9				
	Kalamazoo .....		100.0				
	Van Buren .....	97.0	97.1	100.0	95.8	97.8	95.1
	Others .....	90.1		98.1	93.4	97.2	98.5
EAST	North .....	72.4					
	Saginaw Bay .....	85.3					
	Central .....	90.9					
	West Thumb .....	100.0					
	East Thumb .....	75.0					
	South Central .....	98.6					
	Southeast .....	95.3					
					100.0		
	Genesee .....						
	Jackson and Washtenaw .....						
	Livingston .....						
	Macomb .....						94.3
	Oakland .....						
	Saginaw .....				100.0		
	Others .....				86.0		
	East .....		97.8	86.2		92.3	91.9
<b>STATE .....</b>		<b>88.6</b>	<b>86.1</b>	<b>86.8</b>	<b>95.6</b>	<b>96.2</b>	<b>88.9</b>

The cherry section of the survey instrument is shown at the end of this section. Operators were asked to complete, by block (vineyard or plantation), the block name or number, the county, township and section where that block is located, variety, rootstock, year of planting, trees, acres and spacing for each variety in the block. Each line within a block represents a different variety, rootstock, year of planting, or plant spacing.

These detailed data were obtained for 93 percent of operations. There were 37 percent returned by mail, 41 percent completed by telephone follow-up, and 15 percent done by personal interview. Six percent of the operators refused to do the survey, and one percent were never reached by telephone or by personal interviewers. Estimates of total acres of each fruit were made from various sources for the 7 percent of the 2,650 operations for which detailed block records were not available.

**Table 66. PERCENT OF ACREAGE COMPLETED BY COUNTY AND FRUIT—Continued**

DISTRICT	County	Prunes and Plums	Pears	Nectarines	Apricots	Brambles
NORTHWEST	Antrim .....					
	Benzie .....					
	Grand Traverse .....	98.4				
	Leelanau .....	96.0				
	Manistee .....					
	Others .....	74.7	90.7	100.0	79.1	100.0
WEST CENTRAL	Ionia .....					
	Kent .....	97.1				
	Mason .....	100.0				
	Montcalm .....					
	Muskegon .....					
	Newaygo .....					
	Oceana .....	66.2				
	Ottawa .....					
	Others .....	100.0	93.0	61.0	83.6	100.0
SOUTHWEST	Allegan .....	100.0	83.1			
	Berrien .....	88.8	98.9	97.2		97.8
	Cass .....					
	Kalamazoo .....					
	Van Buren .....	88.6				
	Others .....	98.7	96.2	100.0	100.0	96.4
EAST	North .....					
	Saginaw Bay .....					
	Central .....					
	West Thumb .....					
	East Thumb .....					
	South Central .....					
	Southeast .....					
	Genesee .....					
	Jackson and Washtenaw .....			96.5		
	Livingston .....			100.0		
	Macomb .....			96.8		
	Oakland .....					
	Saginaw .....			83.9		
	Others .....					
	East .....	90.2	82.4		100.0	100.0
	STATE .....	90.3	90.9	90.9	86.1	98.1

The completion rates of the detailed data varied by county and by fruit type. They were calculated by dividing the total acres with complete block data by those acres summed with estimated acres for refusals and inaccessibles. These rates are shown as percentages in the following table. If a county rate is not explicitly shown for a particular fruit, it was grouped with the other counties in the district. The higher the completion rate for a county and fruit, the more accurate are the detailed data shown in the two-way and three-way tables of this bulletin. For this reason, we urge those growers who chose not to participate in 1991 to please consider providing their detailed orchard data in 1994.

There were six steps in processing the questionnaires. The first was manually editing and coding. This was followed by key-entry. Third was computer edits and making updates to data sets. The fourth step was summarization with statistical software. Output was then entered into spreadsheets, where it was expanded and rounded. Expansions were inverses of the completion percents shown in the table below. Lastly, spreadsheets, text and graphs were accessed by desk-top publishing, where camera copy pages were created. Information on rounding rules and publication rules follow. The use of the rounding rules resulted in some columns and rows not summing exactly.

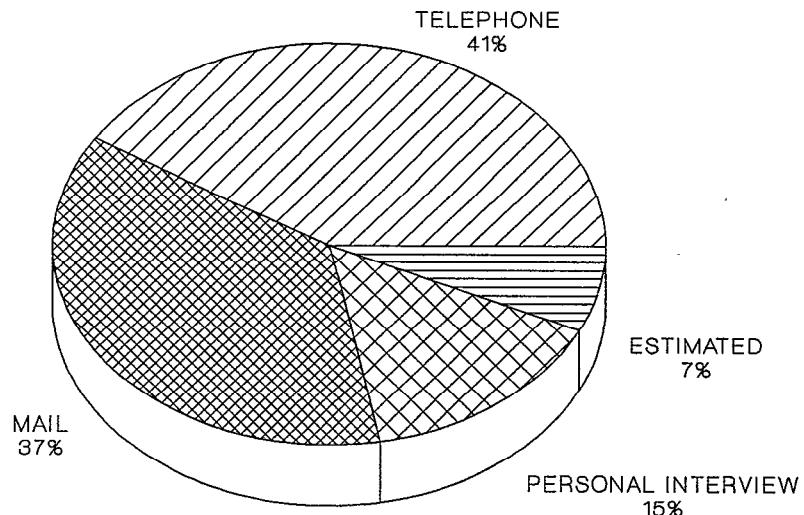
## PUBLICATION RULES

A county must have had at least 50 acres (25 acres for brambles) of a fruit type to have data published explicitly for that county. There must also have been at least three growers of that fruit. Finally no operation could have had more than 60 percent of the acreage in the county.

## ROUNDING RULES

	<u>ROUNDED</u> TO
<u>ACRES</u>	
100 or less .....	1
100-9,999 .....	10
<u>TREES</u>	
100,000 or less .....	100
100,000-999,999 .....	1,000

## DATA COLLECTION METHODS PERCENTS





# 1991 FRUIT SURVEY

December 27, 1991

Dear Grower:

Michigan's Fruit Industry needs updated information for planning, marketing, and production forecasting. The last survey was conducted in 1986. Funds to conduct this project are provided by the Michigan Department of Agriculture. Response to this survey is voluntary and not required by law, however, your voluntary cooperation in reporting the acreage and number of trees you operated in 1991 is needed. **Your mail response by January 20 will be greatly appreciated and will reduce further enumeration costs.** A computer printout of your report will be returned to you for your records. Your report is strictly confidential and cannot be used for taxation or regulatory purposes. Thank you for your help.

(Please make corrections to name, address and zip code, if necessary)

DON J. FEDEWA  
State Statistician

DAVID MAZZOTTA/MARTY SAFFELL  
Statisticians

Does your operation have a name other than that shown on the mailing label?

No       Yes -- Please write the name: \_\_\_\_\_

**IF THE OPERATION ON THE LABEL DOES NOT HAVE ANY APPLES, CHERRIES, PEACHES, BLUEBERRIES, GRAPES, PLUMS, PEARs, APRICOTS, NECTARINES, OR BRAMBLES, PLEASE CHECK HERE \_\_\_\_\_**

\*\*\*\*\* Please see instructions on back page before proceeding. \*\*\*\*\*

## TOTAL ACRES, BEARING ACRES, TREES, VINES AND BUSHES

Please list the total acres, bearing acres, trees, vines and bushes in your operation.

CROP	TOTAL ACREAGE	BEARING ACREAGE	TOTAL TREES/BUSHES/VINES
APPLES	001	005	010
TART CHERRIES	101	105	110
SWEET CHERRIES	151	155	160
BLUEBERRIES	201	205	210
GRAPES	301	305	310
PEACHES	401	405	410

CROP	TOTAL ACREAGE	BEARING ACREAGE	TOTAL TREES/BUSHES
PLUMS	501	505	510
PEARS	601	605	610
BRAMBLES	701	705	710
APRICOTS	801	805	810
NECTARINES	851	855	860
ALL FRUIT	901	905	910

## **CHERRIES**

## TART CHERRIES

<u>Variety</u>	<u>Code</u>
Montmorency . . . . .	111
Galaxy . . . . .	112

## SWEET CHERRIES

<u>Variety</u>	<u>Code</u>	<u>Variety</u>	<u>Code</u>
Emperor Francis .	161	Ranier . . . . .	164
Gold . . . . .	162	Vega . . . . .	165
Napoleon . . . . .	163		

<u>DARK</u>		
<u>Code</u>	<u>Variety</u>	<u>Code</u>
166	Schmidt .....	170
167	Ulster .....	171
168	Van .....	172
169	Windsor .....	173

**\*\*\*Specify all other varieties or selection numbers in variety boxes below.\*\*\***

## **CHERRIES**

## COMMON ROOTSTOCKS AND CODES

Mahaleb = 1

### Mazzard Seeding = 2

Colt = 3

**Other (Specify Name in Rootstock Box)**

## EXAMPLE

BLOCK (Name or Number)		COUNTY (Name)		TOWNSHIP (Name)		SECTION (No.)	VARIETY (Code or Name)		ROOT STOCK	YEAR PLANTED	TREES (Number)	ACRES	SPACING
Home		Grand Traverse		Xavier		5	Schmidt		2	1981	2,400	24 . 0	20 x 20
Home		Grand Traverse		Xavier		5	Napoleon		2	1981	600	6 . 0	20 x 20
North Forty		Grand Traverse		Xavier		4	Montmorency		1	1990	660	5 . 5	18 x 20

## INSTRUCTIONS

Please report only for acreage of fruit you operate, including land rented from others. **Do not include acreage rented to others.**

If you participated in the 1986 Fruit Survey, you may find enclosed a printout of the blocks you reported in 1986. Space has been left on these printouts for you to update the information. Several varieties not listed in 1986 are now printed with their codes. Check all "other" varieties on the block record and update them. Cherry and apple rootstocks are being asked in 1991. Add that information for blocks on the 1986 printout. Your updated copy of the 1986 printout should be returned with this questionnaire in which you should report on new blocks acquired or planted since 1986. If it is easier, you may use the printout as a reference only and list all of your blocks in this questionnaire. All of your fruit blocks must be accounted for between the updated printout and the questionnaire.

If you did not receive a printout from the 1986 survey, complete a line in the questionnaire for each block in your operation. Use the name or number that you use to identify each block. Each block should have its own distinctive name or number. List the county, township and section where the block is located. Include all bearing and non-bearing blocks. Exclude abandoned blocks.

Enter the appropriate variety and root stock codes on the lines and complete the remaining cells for each variety in the block. Round acreage to the nearest tenth of an acre. To separate blocks, draw a line across the hash marks. See examples in the APPLES AND CHERRIES section. If you need space for additional blocks, continue on another page of the questionnaire.

**It is important that we receive a response from all growers.** If you are not able to complete and return the questionnaire by mail, a representative of our office will contact and assist you. If there are any questions or if you need assistance in completing this inquiry, call our office at (517) 334-6001.

To help insure complete coverage of this fruit inventory, please list the name and address of two fruit growers nearest you. All information will be kept confidential.

NAME

ADDRESS

PHONE

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Are you involved in more than one fruit operation? NO \_\_\_\_\_ YES \_\_\_\_\_

If YES -- Please identify that operation NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Your Name \_\_\_\_\_ Phone \_\_\_\_\_

For Office Use Only

Enumerator: \_\_\_\_\_

Status Code: \_\_\_\_\_ 1=Int 2=Tel 3=Mail 4=Ref 5=Inac

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6.	Apple Trees by Year Planted, Variety and District	10
7.	Apple Acres by Rootstock and Variety	20
8.	Apple Trees by Rootstock and Variety	20
9.	Apple Acres by Rootstock, County and District	22
10.	Apple Trees by Rootstock, County and District	22
11.	Other Apple Varieties--Total Acres and Trees	24
12.	Tart Cherry Operations and Acres by Size Groups	26
13.	Tart Cherry Varieties--Total Acres and Trees	27
14.	Tart Cherry Acres by Year Planted, County & District	28
15.	Tart Cherry Trees by Year Planted, County & District	28
16.	Tart Cherry Acres by Year Planted, Rootstock & District	30
17.	Tart Cherry Trees by Year Planted, Rootstock & District	30
18.	Other Sweet Cherry Varieties--Total Acres and Trees	32
19.	Sweet Cherry Acres by Year Planted, County & District	32
20.	Sweet Cherry Trees by Year Planted, County & District	32
21.	Sweet Cherry Acres by Year Planted, Variety & District	34
22.	Sweet Cherry Trees by Year Planted, Variety & District	34
23.	Sweet Cherry Acres by Year Planted, Rootstock & District	38
24.	Sweet Cherry Trees by Year Planted, Rootstock & District	38
25.	Sweet Cherry Operations and Acres by Size Groups	40
26.	Other Blueberry Varieties--Total Acres	42
27.	Blueberry Acres by Year Planted, County & District	42
28.	Blueberry Bushes by Year Planted, County & District	42
29.	Blueberry Acres by Year Planted, Variety & District	44
30.	Blueberry Operations and Acres by Size Groups	47
31.	Grape Acres by Year Planted, County & District	48
32.	Grape Vines by Year Planted, County & District	48
33.	Grape Acres by Year Planted and Trellis Type	48
34.	Grape Acres by Year Planted, Variety & District	50
35.	Other Grape Varieties--Total Acres	52
36.	Grape Operations and Acres by Size Groups	52
37.	Other Peach Varieties--Total Acres and Trees	53
38.	Peach Operations and Acres by Size Groups	53
39.	Peach Acres by Year Planted, County & District	54
40.	Peach Trees by Year Planted, County & District	54
41.	Peach Acres by Year Planted, Variety & District	56
42.	Peach Trees by Year Planted, Variety & District	56
43.	Other Plum Varieties--Total Acres and Trees	64
44.	Plum Acres by Year Planted, County & District	64
45.	Plum Trees by Year Planted, County & District	64
46.	Plum Acres by Year Planted, Variety & District	66
47.	Plum Trees by Year Planted, Variety & District	66
48.	Plum Operations and Acres by Size Groups	69
49.	Other Pear Varieties--Total Acres and Trees	70
50.	Pear Acres by Year Planted, County & District	70
51.	Pear Trees by Year Planted, County & District	70
52.	Pear Operations and Acres by Size Groups	71
53.	Pear Acres by Year Planted, Variety & District	72
54.	Pear Trees by Year Planted, Variety & District	72
55.	Nectarine Varieties--Total Acres and Trees	74
56.	Nectarine Acres by Year Planted, County & District	74
57.	Nectarine Trees by Year Planted, County & District	74
58.	Nectarine Operations and Acres by Size Groups	75
59.	Apricot Varieties--Total Acres and Trees	76
60.	Apricot Acres by Year Planted and District	76
61.	Apricot Trees by Year Planted and District	76
62.	Apricot Operations and Acres by Size Groups	77
63.	Other Bramble Varieties--Total Acres	78
64.	Bramble Acres by Year Planted, County & District	78
65.	Bramble Acres by Year Planted and Variety	78
66.	Percent of Acres Completed by County and Fruit	80