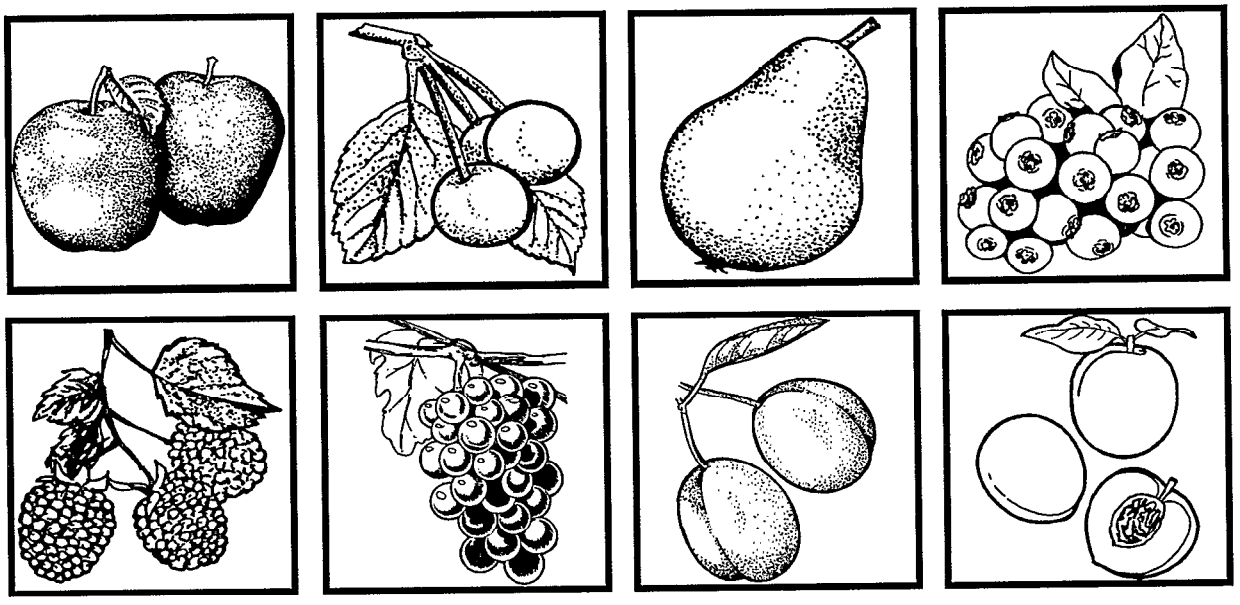
Michigan Rotational Survey

Fruit–1995



Michigan Department of Agriculture

Michigan Agricultural Statistics Service

STATE OF MICHIGAN

JOHN ENGLER, Governor

DEPARTMENT OF AGRICULTURE

P.O. BOX 30017, LANSING, MICHIGAN 48909

DR. GORDON GUYER, Director

October 1995

We are pleased to present the results of the 1994 Michigan Fruit Survey. This bulletin represents a cooperative effort between the private and public sectors to provide data on which Michigan's agricultural industry depends for planning.

This is the fourth report to be published under the Michigan Rotational Survey and re-starts the rotation of commodities. A fruit survey was conducted in 1991 followed by a vegetable survey in 1992, and a nursery and Christmas tree survey in 1993. The survey is funded by the legislature, administered by the Michigan Department of Agriculture, and conducted by the Federal/ State Michigan Agricultural Statistics Service.

We sincerely appreciate the cooperation and assistance of all growers who voluntarily provided the data that made this report possible. We also extend thanks to fruit processors and other industry officials, Michigan State University Extension Service, and data collectors of the National Association of the State Departments of Agriculture.

We 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) 334-6001.

Sincerely,

Gordon Guyer

Dr. Gordon Guyer
Director

Don J. Fedewa

Don J. Fedewa
State Statistician

Michigan Rotational Survey

Fruit-1995

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National Agricultural Statistics Service

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This bulletin is provided free to Michigan farmers and reporting agribusiness firms. Others may obtain copies at $5.00 each. Please make check payable to USDA NASS and send it with your request to P.O.Box 20009, Lansing, Michigan 48901-0608.

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Contents

All Fruit

The total acres of fruit on commercial operations at the end of 1994 was 143,000 acres, down 3 percent from 147,000 acres three years ago. The number of fruit farms fell to 2,536, 144 less (5 percent) than in 1991. That continued the trend toward consolidation of fruit production. A commercial fruit farm was defined as having at least on acre of any one fruit species (or .1 acre of brambles).

Geographic concentration of fruit varied substantially. The top five apple counties accounted for 58 percent of the total acres. Comparable figures for tart cherries and blueberries were 74 percent and 95 percent, respectively. Counties with the most fruit acres were, in order: Berrien, Van Buren, Oceana, Leelanau and Kent. They contained 59 percent of the 143,000 acres of fruit in Michigan.

The densities of most tree fruit continued to rise. Since 1978 the trees per acre for apples has doubled from 67 to 134. The total tart cherries per acre has climbed over that period from 94 to 110; peaches showed a jump from 101 to 137 trees per acre.

Table 1.-All fruit: Number of farms and acres by county and district

County and district	Total farms	Apples	Cherries, tart	Cherries,sweet	Blueberries	Grapes
Antrim	44	480	2,360	850	14	1
Benzie	41	1,190	1,300	350	5	13
Grand Traverse	131	1,100	4,600	1,750	5	140
Leelanau	181	2,150	7,700	3,750	0	145
Manistee	49	2,000	1,200	270	6	1
Charlevoix, Emmet	11	180	240	30	0	0
Northwest	**457**	**7,100**	**17,400**	**7,000**	**30**	**300**
Ionia	34	1,900	0	4	2	2
Kent	151	11,800	630	40	28	10
Mason	36	1,500	1,920	490	33	0
Montcalm, Mecosta	17	1,000	20	14	22	1
Muskegon	50	2,150	520	4	1,090	0
Newaygo	23	2,000	370	8	100	0
Oceana	127	3,500	8,350	550	95	16
Ottawa	185	4,150	190	40	5,550	1
West Central	**623**	**28,000**	**12,000**	**1,150**	**6,920**	**30**
Allegan	142	1,600	420	35	2,700	70
Berrien	532	7,750	3,300	165	985	6,100
Cass	33	1,000	450	5	15	630
Kalamazoo	32	550	160	5	40	380
Van Buren	409	6,700	2,130	80	6,560	4,700
Southwest	**1,148**	**17,600**	**6,460**	**290**	**10,300**	**11,880**
North	23	120	7	10	14	1
Saginaw Bay	34	150	17	5	120	2
Central	53	850	2	5	70	4
West Thumb	43	950	75	5	97	33
East Thumb	63	1,600	18	31	200	17
South Central	36	730	6	2	24	32
Southeast	56	900	15	2	25	1
East	**308**	**5,300**	**140**	**60**	**550**	**90**
Total	**2,536**	**58,000**	**36,000**	**8,500**	**17,800**	**12,300**

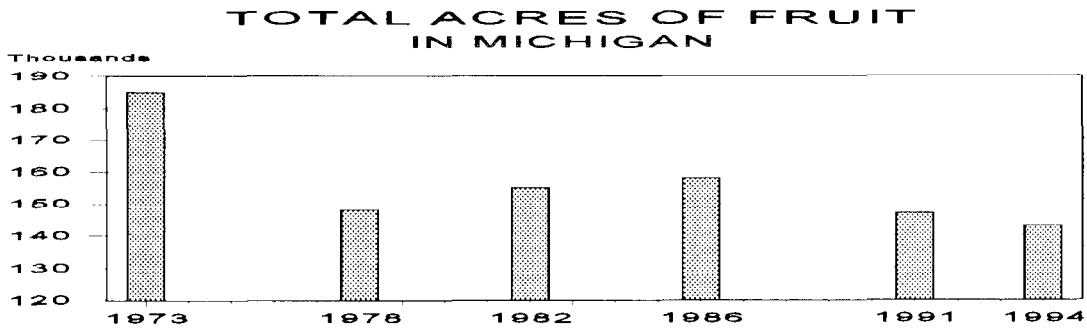
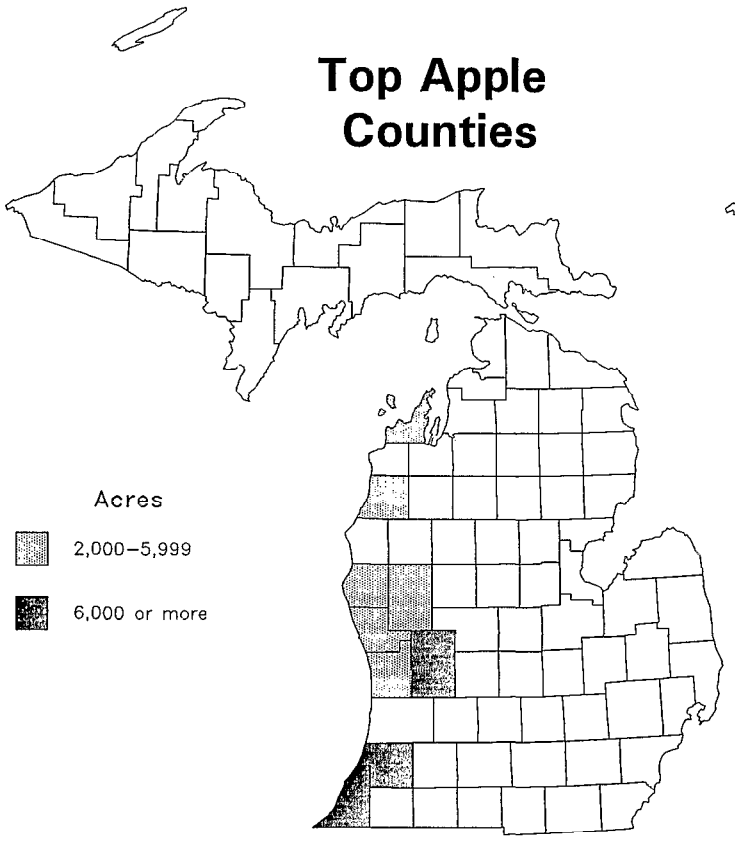


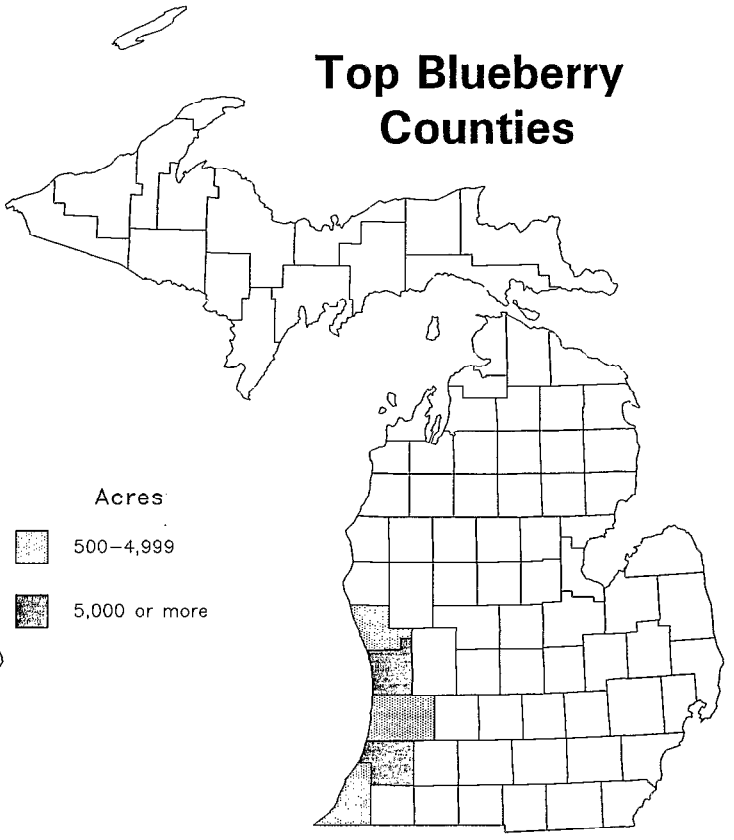
Table 1.-All fruit: Number of farms and acres by county and district (continued)

County and district	Peaches	Plums	Pears	Brambles	Apricots	Nectarines	Total
Antrim	37	6	30	6	5	1	3,790
Benzie	19	23	16	4	5	0	2,920
Grand Traverse	21	160	55	3	2	5	7,840
Leelanau	49	280	34	1	29	3	14,100
Manistee	170	30	21	9	13	0	3,720
Charlevoix, Emmet	4	1	4	7	1	0	470
Northwest	**300**	**500**	**160**	**30**	**55**	**9**	**32,800**
Ionia	10	1	4	8	0	1	1,930
Kent	220	85	23	14	1	9	12,900
Mason	250	180	69	0	0	1	4,440
Montcalm, Mecosta	20	2	3	4	1	1	1,090
Muskegon	160	7	4	1	2	2	3,940
Newaygo	190	30	36	2	4	8	2,750
Oceana	1,500	370	250	2	19	3	14,700
Ottawa	100	25	11	9	3	8	10,100
West Central	**2,450**	**700**	**400**	**40**	**30**	**33**	**51,800**
Allegan	530	95	170	15	4	5	5,640
Berrien	2,620	220	150	130	22	160	21,600
Cass	50	42	1	4	0	0	2,200
Kalamazoo	20	8	4	0	0	1	1,170
Van Buren	580	300	115	51	7	19	21,200
Southwest	**3,800**	**665**	**440**	**200**	**33**	**185**	**51,800**
North	1	0	1	19	0	0	170
Saginaw Bay	15	1	9	18	1	0	340
Central	13	4	6	25	0	0	980
West Thumb	34	8	16	65	0	0	1,280
East Thumb	120	15	45	49	1	1	2,100
South Central	12	1	12	11	0	0	830
Southeast	55	6	11	43	0	2	1,060
East	**250**	**35**	**100**	**230**	**2**	**3**	**6,760**
Total	**6,800**	**1,900**	**1,100**	**500**	**120**	**230**	**143,000**

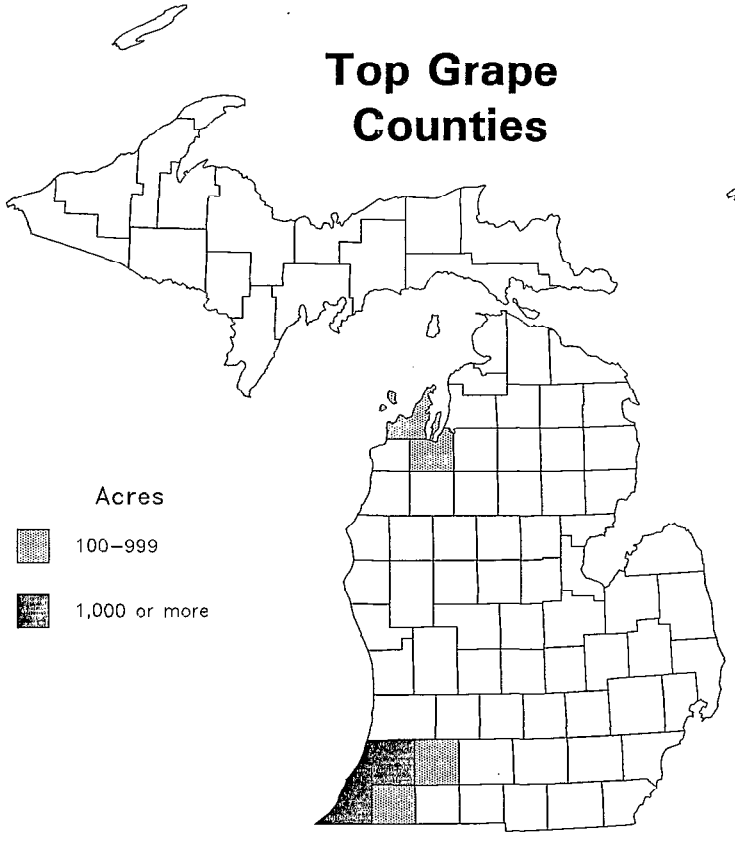
Top Apple Counties



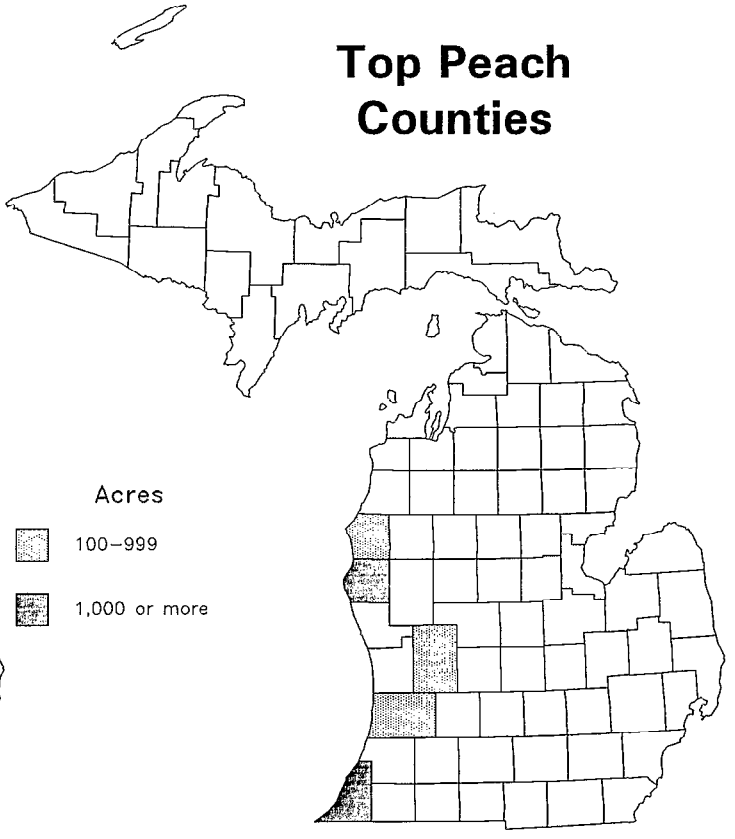
Top Blueberry Counties



Top Grape Counties

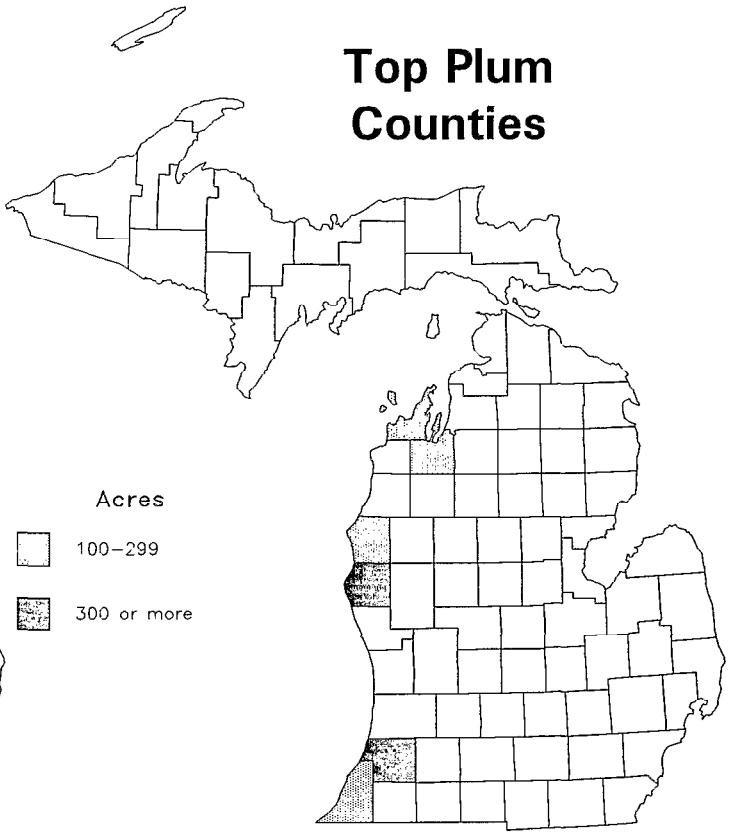


Top Peach Counties

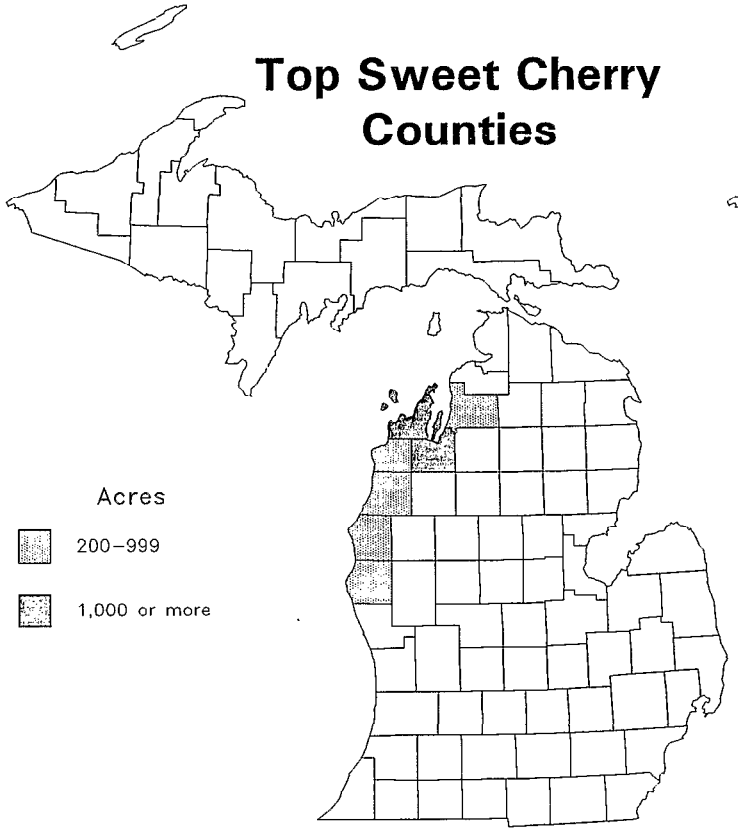


Top Pear Counties

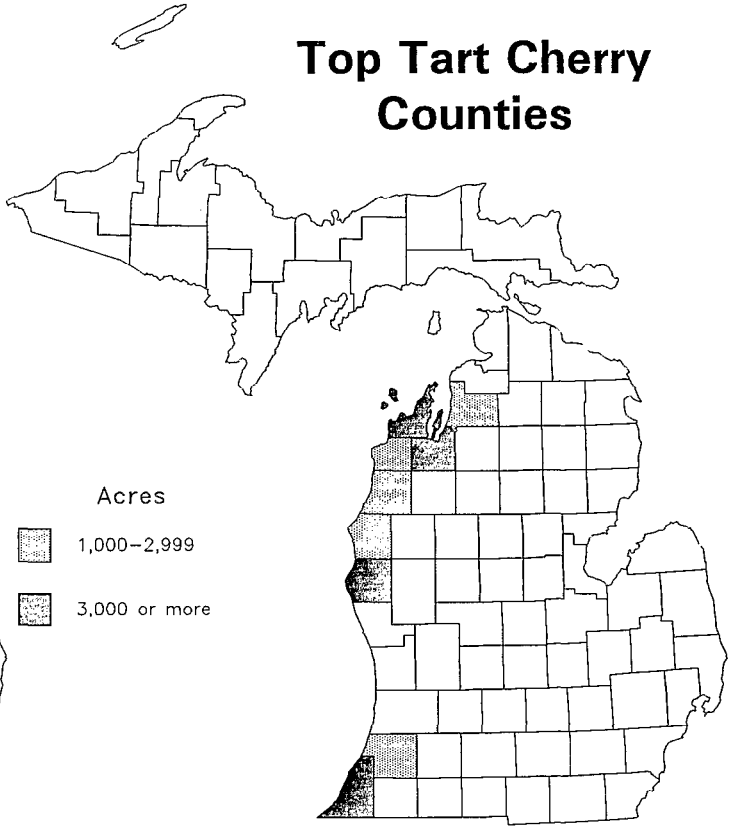
Top Plum Counties



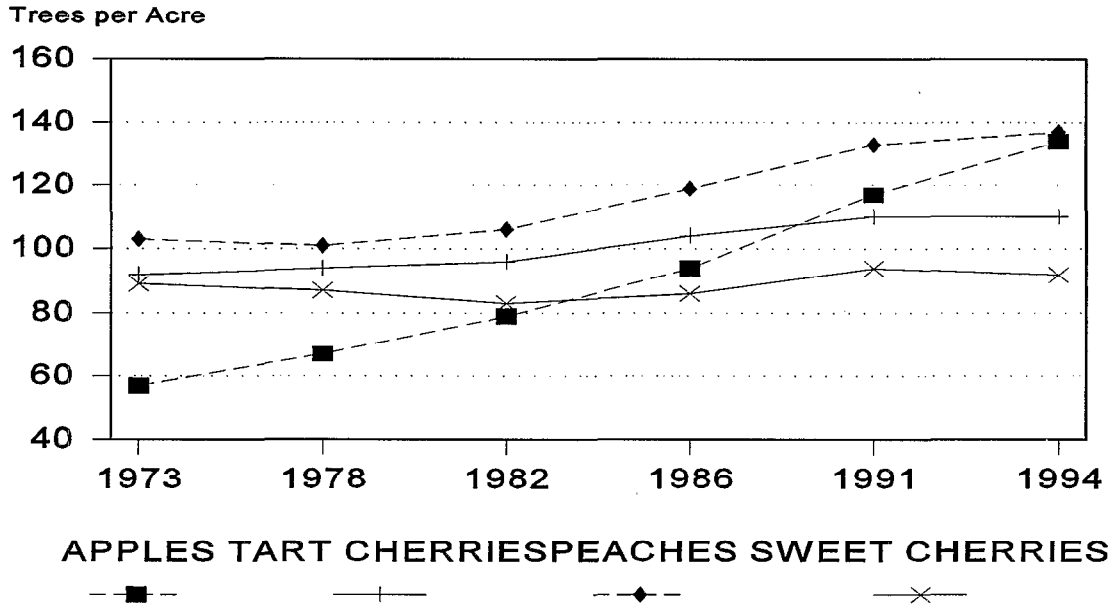
Top Sweet Cherry Counties



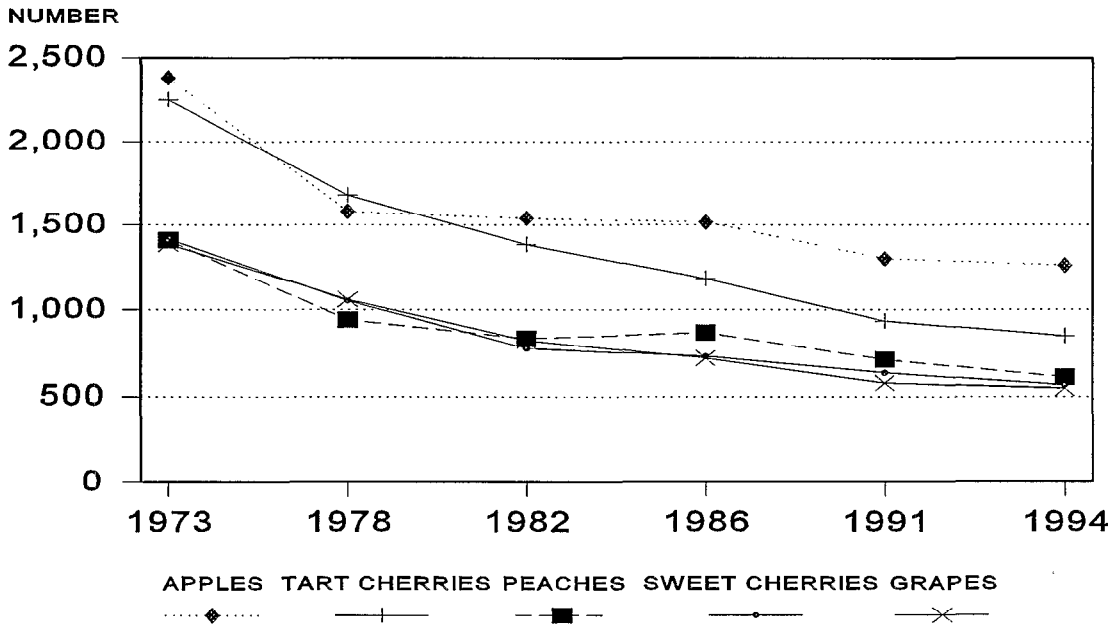
Top Tart Cherry Counties



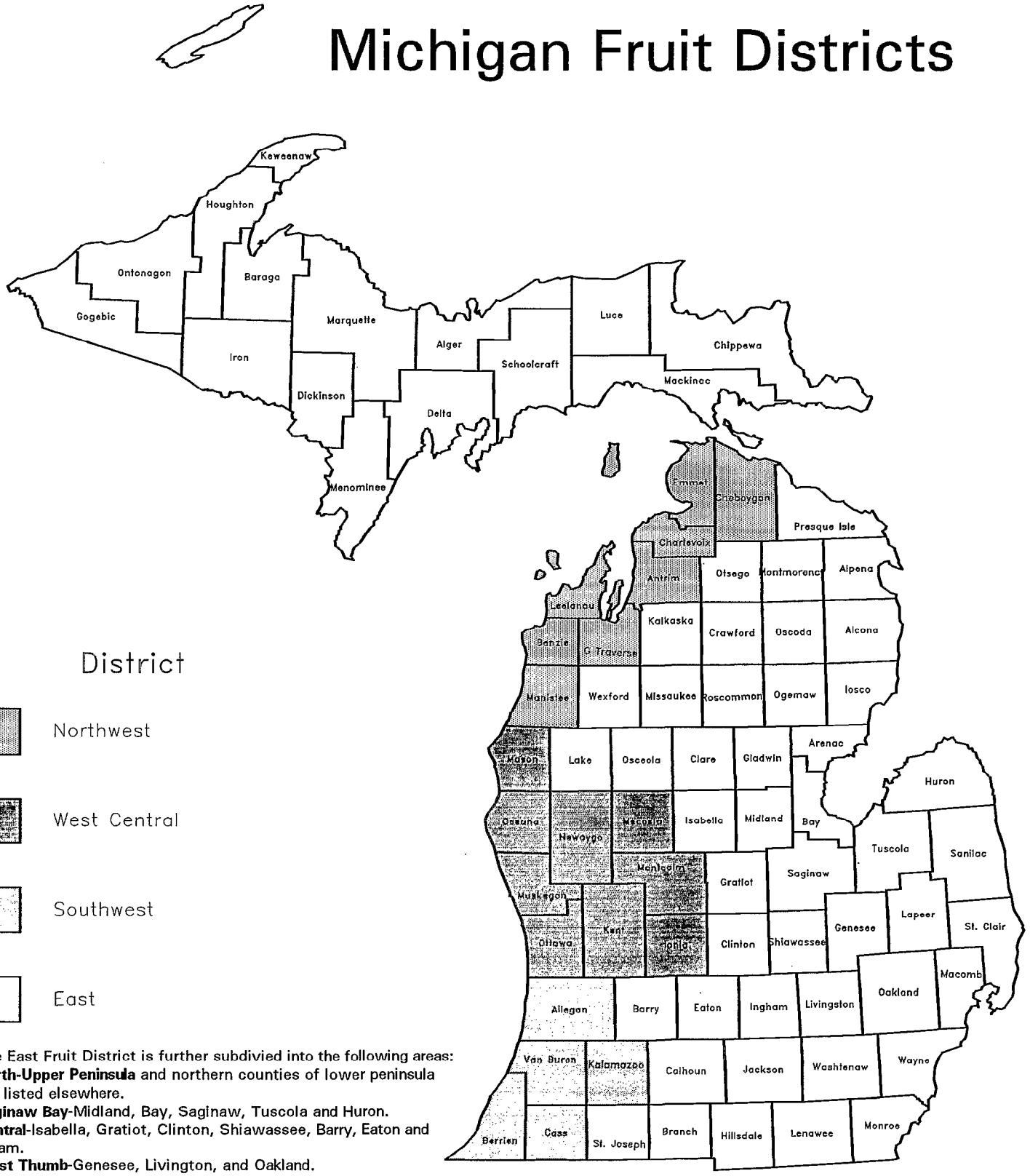
DENSITIES OF VARIOUS
MICHIGAN FRUITS



COMMERCIAL OPERATIONS
GROWING FRUITS IN MICHIGAN



Michigan Fruit Districts



District

- Northwest
- West Central
- Southwest
- East

The East Fruit District is further subdivied into the following areas:
North-Upper Peninsula and northern counties of lower peninsula not listed elsewhere.
Saginaw Bay-Midland, Bay, Saginaw, Tuscola and Huron.
Central-Isabella, Gratiot, Clinton, Shiawassee, Barry, Eaton and Igham.
West Thumb-Genesee, Livington, and Oakland.
East Thumb-Sanilac, Lapeer, St. Clair and Macomb.
South Central-Calhoun, Jackson, St. Joseph, Branch and Hillsdale.
Southeast-Washtenaw, Wayne, Lenawee, and Monroe.

Apples

The number of commercial apple farms fell 3 percent from 1991 to 1,260. That was much smaller than the 14 percent drop from 1986 to 1991. Apple acres remained at 58,000. The number of trees, however, leaped to 7.8 million, up by one million from 1991. Kent was the top county, followed in order by Berrien, Van Buren, Ottawa and Oceana.

The top five varieties in total acres were Red Delicious, Golden Delicious, Jonathan, Rome and McIntosh. From 1992-94 the most commonly planted varieties were, in order, Jonagold, Golden Delicious and Empire.

The West Central District was split for apple tables on varieties and rootstocks. Oceana-Mason, of course, consists of Oceana and Mason counties. The Grand Rapids area consists of Kent, Ottawa, Ionia, Muskegon, Newaygo, Montcalm and Mecosta Counties.

The density on plantings from 1992 through 1994 was nearly 300 trees per acre. There were one thousand acres with at least 500 trees per acre.

About 3,000 acres of seedling trees were removed from 1991-1994. Detailed tables on removals by variety and age cohort are planned for the 1997 survey.

Table 1.-Apples: Number of farms and acres by county and district, 1982-1994

County and district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Antrim[1]	40	40	31	30	620	790	740	660
Benzie	40	38	27	28	1,190	1,230	1,160	1,190
Grand Traverse	71	70	65	61	1,270	1,260	1,150	1,100
Leelanau	53	63	65	70	1,390	2,000	2,120	2,150
Manistee	45	44	37	36	1,850	1,820	2,050	2,000
Northwest	**249**	**255**	**225**	**225**	**6,320**	**7,100**	**7,220**	**7,100**
Ionia	28	38	36	31	2,040	2,220	1,990	1,900
Kent	173	172	145	138	11,340	12,880	11,800	11,800
Mason	39	37	31	31	1,700	1,620	1,490	1,500
Montcalm,Mecosta	19	19	13	11	940	980	960	1,000
Muskegon	16	25	18	16	2,000	2,160	2,250	2,150
Newaygo	27	24	23	20	1,790	1,900	1,910	2,000
Oceana	122	105	87	90	3,300	3,510	3,260	3,500
Ottawa	50	61	52	54	4,220	4,130	3,820	4,150
West Central	**474**	**481**	**405**	**391**	**27,330**	**29,400**	**27,400**	**28,000**
Allegan	72	71	54	53	2,120	2,070	1,710	1,600
Berrien	316	289	242	233	7,840	8,290	8,000	7,750
Cass	23	28	21	18	950	1,370	1,040	1,000
Kalamazoo	21	19	15	13	540	650	640	550
Van Buren	133	130	103	104	6,800	6,420	6,370	6,700
Southwest	**565**	**537**	**435**	**421**	**18,250**	**18,800**	**17,800**	**17,600**
North	NA	NA	16	15	NA	NA	130	120
Saginaw Bay	NA	NA	20	18	NA	NA	190	150
Central	NA	NA	40	38	NA	NA	890	850
West Thumb	NA	NA	33	31	NA	NA	960	950
East Thumb	NA	NA	53	49	NA	NA	1,760	1,600
South Central	NA	NA	24	26	NA	NA	700	730
Southeast	NA	NA	49	46	NA	NA	950	900
East	252	243	235	223	7,440	6,400	5,580	5,300
Total	**1,540**	**1,516**	**1,300**	**1,260**	**59,340**	**61,700**	**58,000**	**58,000**

NA = not available

[1] Includes Charlevoix, Cheboygan, and Emmet.

Table 2.-Apples: Number of high density farms and acres by size group

[High density = 500 trees or more per acre]

Size group	Farms	Acres
Less than 1 acre	20	10
1-4.9 acres	27	65
5-9.9 acres	13	105
10-24.9 acres	8	130
25-49.9 acres	9	340
50 or more acres	3	350
Total	**80**	**1,000**

Table 3.-Apples: Number of high density farms and acres by district

[High density = 500 trees or more per acre]

District	Farms	Acres
Northwest,Oceana-Mason and East	15	90
Grand Rapids	32	460
Southwest	33	450
Total	**80**	**1,000**

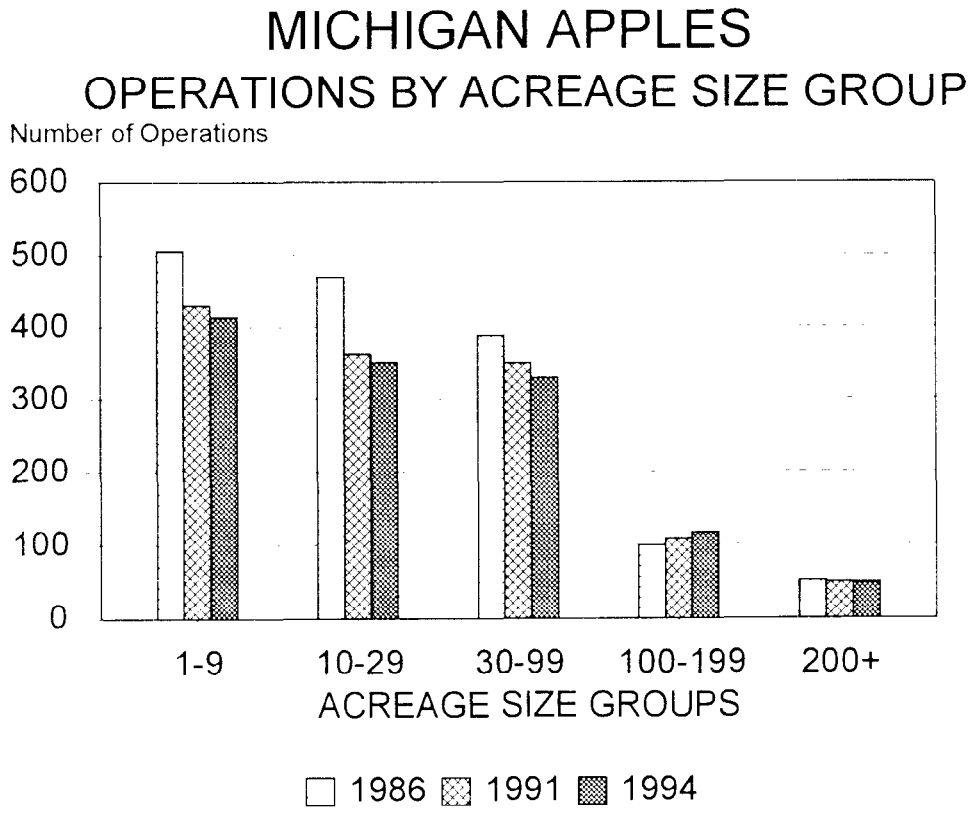


Table 4.-Apples: Acres by variety and year planted

Year planted	Cortland	Empire	Fuji	Gala	Golden Delic-ious	Ida Red	Jonagold	Jonamac	Jona-than (regular)	Jona-than (sport)	McIn-tosh
1959 and before	150	10	0	0	740	200	0	0	3,550	43	1,430
1960-1964	7	29	0	0	730	320	0	0	1,150	10	230
1965-1969	25	12	0	13	830	350	0	0	520	65	260
1970-1974	30	52	0	0	650	680	0	13	320	110	460
1975	6	76	0	0	140	200	0	0	76	20	100
1976	9	54	0	0	110	220	0	2	86	16	120
1977	5	40	0	0	110	200	0	0	14	19	120
1978	4	110	0	1	90	380	0	0	28	3	130
1979	6	63	0	0	95	240	0	3	37	12	120
1980	14	190	0	6	160	420	2	2	96	28	180
1981	16	170	0	4	110	190	0	8	38	24	120
1982	10	280	0	2	180	210	11	18	68	54	260
1983	25	320	0	4	170	210	2	16	74	68	170
1984	9	300	0	3	220	180	4	21	83	59	120
1985	10	290	0	34	85	140	5	30	88	23	87
1986	19	150	0	21	210	100	8	6	36	38	72
1987	13	140	0	120	180	70	20	23	56	140	140
1988	9	95	2	90	190	43	11	25	57	82	100
1989	22	140	4	110	230	59	16	1	130	120	170
1990	18	160	16	190	170	40	61	13	110	120	140
1991	23	170	65	190	200	45	140	34	77	110	58
1992	26	210	110	84	180	55	200	12	92	38	35
1993	33	200	80	28	140	50	160	16	23	59	36
1994	31	69	53	90	170	28	180	27	11	69	22
Total	**520**	**3,330**	**330**	**990**	**6,090**	**4,630**	**820**	**270**	**6,820**	**1,330**	**4,680**

Table 4.Apples: Acres by variety and year planted (continued)

Year planted	Mutsu	North-ern Spy	Paula Red	Red Delic-ious (regular)	Red Delic-ious (sport)	R I Green-ing	Rome (regular)	Rome (sport)	Spartan	Wine-sap	Others	Total
1959 and before	3	1,270	18	1,980	360	150	620	16	0	400	260	**11,200**
1960-1964	25	200	30	760	740	65	270	35	9	70	20	**4,700**
1965-1969	75	380	220	500	510	270	390	20	10	100	70	**4,620**
1970-1974	65	310	480	520	1,000	45	520	85	46	160	54	**5,600**
1975	24	56	90	89	200	30	130	34	2	9	18	**1,300**
1976	10	37	57	27	210	1	100	24	4	3	30	**1,120**
1977	11	67	50	50	180	1	110	52	24	36	21	**1,110**
1978	6	48	72	33	200	15	200	44	14	3	19	**1,400**
1979	12	40	30	26	210	1	89	24	7	13	42	**1,070**
1980	15	79	62	54	630	11	190	73	13	6	29	**2,260**
1981	19	28	46	44	610	10	120	130	18	1	34	**1,740**
1982	10	42	64	67	740	7	110	62	27	3	85	**2,310**
1983	31	160	18	110	480	1	190	44	43	3	31	**2,170**
1984	20	99	22	78	650	4	160	50	53	14	51	**2,200**
1985	57	120	17	100	350	6	120	96	25	7	40	**1,730**
1986	60	120	17	24	380	3	100	74	26	13	33	**1,510**
1987	42	93	29	39	610	1	75	67	2	12	28	**1,900**
1988	18	76	1	30	400	0	18	30	20	11	42	**1,350**
1989	26	84	24	24	360	1	56	91	11	2	29	**1,710**
1990	44	97	2	16	260	0	66	110	25	5	37	**1,700**
1991	35	91	11	15	160	3	68	66	27	2	110	**1,700**
1992	16	34	28	8	51	14	42	54	21	10	130	**1,450**
1993	13	26	5	4	59	0	5	40	0	10	63	**1,050**
1994	13	53	7	2	150	1	21	39	3	7	54	**1,100**
Total	**650**	**3,610**	**1,400**	**4,600**	**9,500**	**640**	**3,770**	**1,360**	**430**	**900**	**1,330**	**58,000**

Table 5.-Apples: Acres and trees by variety and district

Variety	Northwest		Grand Rapids		Mason-Oceana	
	Acres	Trees	Acres	Trees	Acres	Trees
Cortland	71	7,900	140	23,000	69	8,100
Empire	270	48,000	1,910	360,000	270	45,000
Fuji	3	600	180	68,800	8	1,500
Gala	60	15,000	560	190,000	85	15,000
Golden Delicious	740	100,000	1,590	235,000	530	68,000
Ida Red	1,000	140,000	2,100	265,000	600	83,000
Jonagold	80	25,500	400	160,000	110	23,500
Jonamac	10	3,400	140	28,000	6	1,500
Jonathan (regular)	510	39,000	1,930	150,000	470	48,500
Jonathan (sport)	27	3,500	580	120,000	26	3,800
McIntosh	950	105,000	1,830	215,000	510	49,800
Mutsu	110	15,300	150	20,200	160	23,100
Northern Spy	1,450	155,000	1,040	89,700	410	44,400
Paula Red	29	4,400	750	96,000	51	13,500
R I Greening	270	28,600	10	1,100	230	22,000
Red Delicious (regular)	510	36,000	1,750	145,000	460	39,000
Red Delicious (sport)	400	57,000	4,340	710,000	550	85,000
Rome (regular)	170	24,500	2,000	225,000	310	45,500
Rome (sport)	96	19,700	710	140,000	35	6,100
Spartan	48	7,200	260	43,600	34	4,800
Winesap	6	400	290	22,600	26	2,300
Others	290	24,000	340	72,000	50	6,600
Total	**7,100**	**860,000**	**23,000**	**3,380,000**	**5,000**	**640,000**

Table 5.-Apples: Acres and trees by variety and district (continued)

Variety	Southwest		East		Total	
	Acres	Trees	Acres	Trees	**Acres**	**Trees**
Cortland	120	22,000	120	16,000	**520**	**77,000**
Empire	660	125,000	220	42,000	**3,330**	**620,000**
Fuji	90	32,100	49	17,000	**330**	**120,000**
Gala	220	61,000	65	19,000	**990**	**300,000**
Golden Delicious	2,620	360,000	610	72,000	**6,090**	**835,000**
Ida Red	600	69,000	330	43,000	**4,630**	**600,000**
Jonagold	180	63,200	50	12,800	**820**	**285,000**
Jonamac	89	13,000	25	6,100	**270**	**52,000**
Jonathan (Regular)	3,400	255,000	510	42,500	**6,820**	**535,000**
Jonathan (Sport)	660	100,000	37	7,700	**1,330**	**235,000**
McIntosh	690	81,500	700	73,700	**4,680**	**525,000**
Mutsu	160	21,600	70	9,800	**650**	**90,000**
Northern Spy	290	31,600	420	29,300	**3,610**	**350,000**
Paula Red	420	53,000	150	23,100	**1,400**	**190,000**
R I Greening	120	8,900	10	1,400	**640**	**62,000**
Red Delicious (Regular)	1,140	88,000	740	72,000	**4,600**	**380,000**
Red Delicious (Sport)	3,600	580,000	610	88,000	**9,500**	**1,520,000**
Rome (Regular)	1,140	115,000	150	20,000	**3,770**	**430,000**
Rome (Sport)	490	80,000	29	4,200	**1,360**	**250,000**
Spartan	51	7,500	37	5,900	**430**	**69,000**
Winesap	490	48,600	88	11,100	**900**	**85,000**
Others	370	44,000	280	43,400	**1,330**	**190,000**
Total	**17,600**	**2,260,000**	**5,300**	**660,000**	**58,000**	**7,800,000**

Table 6.-Apples: Trees by variety and year planted

Year planted	Cort-land	Empire	Fuji	Gala	Golden Delic-ious	Ida Red	Jonagold	Jona-mac	Jonathan (regular)	Jona-than (sport)	McIntosh
1959 and before	6,100	400	0	0	41,000	12,400	0	0	160,000	3,020	60,400
1960-1964	600	2,750	0	0	65,700	25,300	0	0	85,300	1,580	16,400
1965-1969	2,000	1,450	0	1,570	95,000	35,400	0	0	47,600	8,400	26,400
1970-1974	3,050	7,700	0	0	76,100	86,400	0	1,920	32,100	14,100	53,000
1975	740	10,900	0	0	19,100	25,800	0	0	10,100	2,440	14,200
1976	1,160	9,200	0	0	14,400	26,900	0	370	11,700	2,430	16,600
1977	640	6,500	0	0	15,600	24,900	0	0	1,900	2,390	17,600
1978	550	16,900	0	150	13,400	52,600	0	0	3,800	440	19,600
1979	890	10,000	0	0	12,800	33,500	0	450	4,800	1,540	17,600
1980	2,040	29,800	0	950	20,800	56,800	210	320	12,500	4,200	25,700
1981	2,240	25,100	0	780	15,000	26,400	0	1,050	5,300	3,030	17,900
1982	1,320	42,200	0	300	23,000	25,800	1,700	2,290	8,800	7,880	34,500
1983	3,570	48,300	0	900	23,500	30,100	300	1,960	9,850	10,800	28,200
1984	1,240	48,200	0	700	29,000	26,700	500	2,640	12,700	10,300	19,000
1985	1,500	44,700	0	5,350	12,700	22,400	720	4,770	16,600	3,600	15,500
1986	3,050	24,300	0	4,100	31,800	16,100	1,350	960	5,250	5,850	12,800
1987	2,050	25,600	0	26,000	29,900	11,700	4,450	3,650	9,900	23,200	24,100
1988	1,470	18,000	330	30,200	29,200	6,500	2,380	3,550	10,900	20,800	17,200
1989	3,430	26,100	770	26,400	42,100	11,600	3,690	220	22,400	23,800	31,500
1990	3,750	34,900	4,200	60,600	42,300	7,300	15,000	3,200	20,800	19,700	23,900
1991	4,480	42,800	20,200	60,000	40,500	7,600	52,100	8,600	14,900	24,200	14,500
1992	6,630	61,900	45,600	26,200	47,300	13,500	73,000	2,450	21,000	8,000	5,200
1993	9,500	59,300	29,000	11,300	48,000	9,100	59,100	7,400	4,900	17,400	8,500
1994	15,000	23,000	19,900	44,500	46,800	5,200	70,500	6,200	1,900	15,900	4,700
Total	**77,000**	**620,000**	**120,000**	**300,000**	**835,000**	**600,000**	**285,000**	**52,000**	**535,000**	**235,000**	**525,000**

Table 6.-Apples: Trees by variety and year planted (continued)

Mutsu	North-ern Spy	Paula Red	Red Delicious (regular)	Red Delici-ous (sport)	R I Green-ing	Rome (regular)	Rome (sport)	Spartan	Wine-sap	Others	Total
260	41,700	1,610	94,400	22,600	6,260	30,400	1,050	0	17,800	10,600	**510,000**
2,570	16,400	3,740	60,700	67,300	4,590	19,800	4,100	800	5,410	1,960	**385,000**
7,940	41,900	26,800	48,300	58,200	31,600	35,800	2,100	1,300	9,780	8,460	**490,000**
7,610	35,400	61,200	58,000	132,000	5,000	63,700	11,400	6,000	18,000	7,320	**680,000**
2,770	6,800	11,200	11,300	27,200	2,880	15,600	5,630	320	1,190	1,830	**170,000**
1,340	4,460	8,400	2,960	33,600	100	12,500	3,240	570	420	4,650	**155,000**
1,440	7,270	6,900	7,420	27,200	110	13,800	7,870	3,000	6,920	2,540	**155,000**
820	6,050	10,300	3,830	28,000	1,500	24,000	7,880	2,030	380	2,770	**195,000**
1,670	5,110	3,740	3,200	31,100	110	11,600	3,350	920	1,420	6,200	**150,000**
2,200	9,790	8,740	7,500	110,000	1,320	27,800	12,600	1,820	680	4,230	**340,000**
2,430	3,410	5,200	5,260	100,000	1,340	16,500	21,800	2,930	110	4,220	**260,000**
1,200	5,410	7,440	6,820	143,000	1,330	15,700	9,070	3,290	350	8,600	**350,000**
4,050	24,900	2,280	13,700	79,600	130	29,600	6,910	5,580	380	5,390	**330,000**
2,800	13,600	2,450	11,700	113,000	670	25,100	9,510	7,480	1,670	6,040	**345,000**
7,450	15,100	2,400	16,600	56,400	1,100	16,500	18,200	4,110	860	8,440	**275,000**
9,000	15,700	2,730	2,960	70,100	560	16,500	11,000	3,670	1,610	5,610	**245,000**
5,600	14,300	3,820	6,400	98,900	150	11,600	12,200	430	1,640	4,410	**320,000**
2,710	12,600	150	4,680	76,200	0	2,600	4,890	2,900	1,650	6,090	**255,000**
4,700	15,200	5,820	5,810	71,000	140	8,770	19,100	2,550	300	4,600	**330,000**
7,370	18,700	610	2,270	49,800	0	10,300	25,900	7,450	710	6,240	**365,000**
6,970	15,900	2,700	3,410	45,000	440	11,800	15,100	6,350	450	22,000	**420,000**
2,500	5,600	9,900	1,400	14,200	2,530	5,960	13,800	4,400	3,930	30,000	**405,000**
2,700	7,100	780	750	13,100	0	770	12,900	0	4,900	13,500	**320,000**
1,900	7,600	1,090	630	52,500	140	3,300	10,400	1,100	4,440	13,300	**350,000**
90,000	**350,000**	**190,000**	**380,000**	**1,520,000**	**62,000**	**430,000**	**250,000**	**69,000**	**86,000**	**190,000**	**7,800,000**

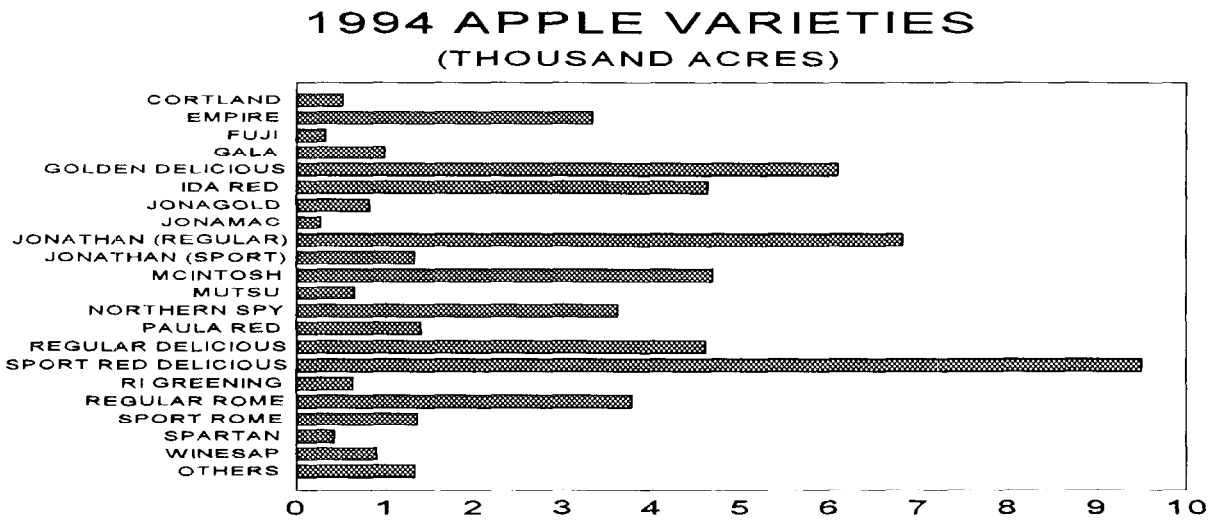


Table 7.- Apples, roostocks: Acres by variety

Variety	Seedling	111	106	7(VII)	26	Mark
Cortland	170	76	37	70	45	14
Empire	58	770	410	1,010	490	130
Fuji	3	18	14	54	70	54
Gala	2	120	62	200	250	150
Golden Delicious	1,370	1,180	1,000	1,050	400	110
Ida Red	730	980	800	870	260	32
Jonagold	0	78	120	180	140	120
Jonamac	10	54	35	120	17	7
Jonathan (regular)	4,260	730	440	510	120	60
Jonathan (sport)	50	400	220	390	73	33
MacIntosh	1,710	510	700	790	340	62
Mutsu	45	130	97	160	75	25
Northern Spy	1,400	220	600	570	260	160
Páula Red	86	320	390	300	110	23
Red Delicious (regular)	2,620	540	420	320	76	15
Red Delicious (sport)	990	2,500	1,600	2,140	950	140
RI Greening	230	30	86	49	2	0
Rome (regular)	1,150	880	450	580	180	13
Rome (sport)	72	380	180	410	100	17
Spartan	24	60	39	160	55	9
Winesap	500	84	90	87	27	7
Others	320	140	150	180	150	49
Total	**15,800**	**10,200**	**7,940**	**10,200**	**4,190**	**1,230**

Table 7.-Apples, rootstocks: Acres by variety (continued)

Variety	9 (IX)	Interstem	Others	Unknown	**Total**
Cortland	25	2	7	74	**520**
Empire	89	67	6	300	**3,330**
Fuji	63	12	2	40	**330**
Gala	45	9	2	150	**990**
Golden Delicious	150	46	64	720	**6,090**
Ida Red	130	74	14	740	**4,630**
Jonagold	140	6	6	30	**820**
Jonamac	14	1	0	12	**270**
Jonathan (regular)	64	66	100	470	**6,820**
Jonathan (sport)	44	12	8	100	**1,330**
McIntosh	59	34	25	450	**4,680**
Mutsu	13	4	7	94	**650**
Northern Spy	32	19	9	340	**3,610**
Paula Red	41	18	2	110	**1,400**
Red Delicious (regular)	32	83	34	460	**4,600**
Red Delicious (sport)	210	72	78	820	**9,500**
RI Greening	3	4	16	220	**640**
Rome(regular)	100	46	21	350	**3,770**
Rome(sport)	54	12	5	130	**1,360**
Spartan	30	0	0	53	**430**
Winesap	14	1	3	87	**900**
Others	68	12	11	250	**1,330**
Total	**1,420**	**600**	**420**	**6,000**	**58,000**

Table 8.-Apples, rootstocks: Trees by variety

Variey	Seedling	111	106	7(VII)	26	Mark
Cortland	7,260	10,000	5,890	10,700	12,200	3,720
Empire	9,200	113,000	66,000	159,000	121,000	59,700
Fuji	1,040	2,470	2,070	9,730	21,500	28,000
Gala	370	18,000	9,260	45,200	91,000	59,500
Golden Delicious	92,700	155,000	137,000	150,000	96,600	46,000
Ida Red	63,400	122,000	104,000	120,000	47,900	11,600
Jonagold	0	12,700	31,400	29,800	48,900	54,100
Jonamac	2,240	7,770	4,910	18,500	4,310	4,080
Jonathan (regular)	205,000	83,100	58,400	71,500	24,400	21,100
Jonathan (sport)	2,730	58,700	30,500	73,400	21,900	14,200
McIntosh	80,900	67,200	93,200	113,000	79,200	17,000
Mutsu	0	13,700	11,700	25,000	13,500	6,670
Northern Spy	51,600	27,000	72,800	69,300	42,400	36,900
Paula Red	8,250	38,600	49,600	39,100	18,400	9,270
Red Delicious (regular)	139,000	63,800	51,500	39,500	12,200	3,700
Red Delicious (sport)	87,200	346,000	266,000	362,000	263,000	30,800
RI Greening	13,400	2,940	11,300	6,370	320	0
Rome (regular)	68,800	111,000	60,400	83,500	32,900	2,760
Rome (sport)	8,280	63,000	30,100	67,900	24,300	6,100
Spartan	4,090	10,400	4,570	23,100	10,400	2,020
Winesap	24,800	8,320	10,800	10,400	6,370	2,180
Others	13,400	15,300	18,600	23,000	37,300	20,600
Total	**888,000**	**1,350,000**	**1,130,000**	**1,550,000**	**1,030,000**	**440,000**

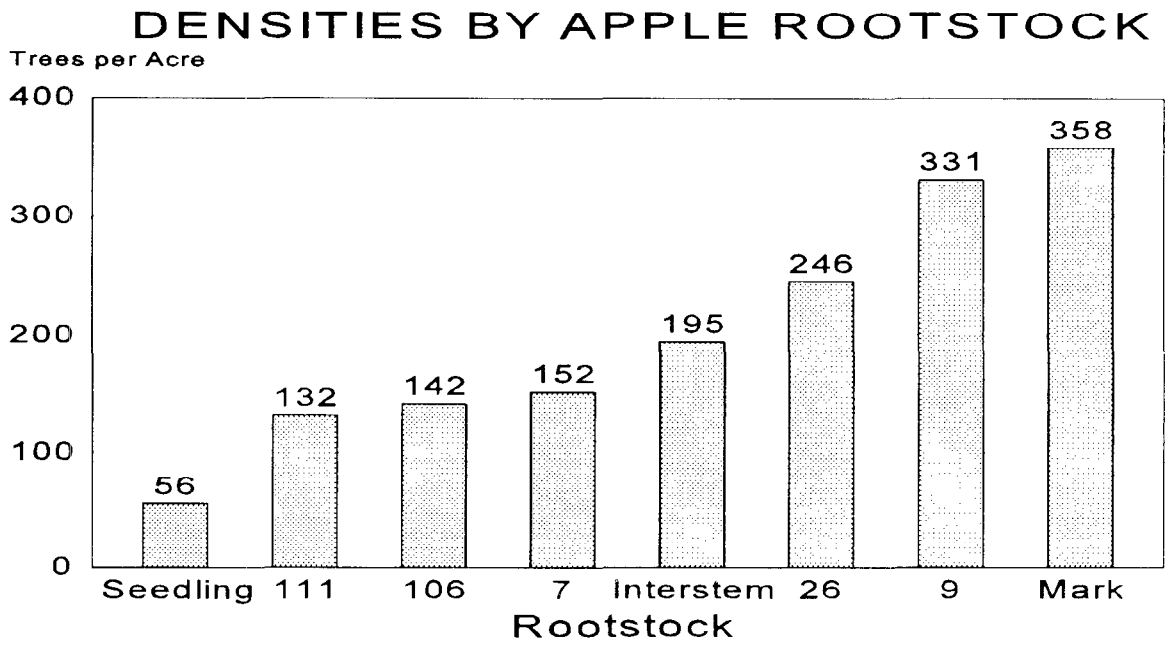


Table 8.-Apples, rootstocks: Trees by variety (continued)

Variety	9(IX)	Interstem	Others	Unknown	**Total**
Cortland	16,700	450	1,290	8,790	**77,000**
Empire	33,500	17,200	1,100	40,300	**620,000**
Fuji	36,800	6,500	290	11,600	**120,000**
Gala	30,900	8,500	670	36,600	**300,000**
Golden Delicious	54,900	7,200	8,100	87,500	**835,000**
Ida Red	27,600	14,100	1,400	88,000	**600,000**
Jonagold	93,700	2,030	1,870	10,500	**285,000**
Jonamac	7,460	250	0	2,480	**52,000**
Jonathan (regular)	11,300	6,500	9,200	44,500	**535,000**
Jonathan (sport)	14,000	2,820	1,250	15,500	**235,000**
McIntosh	11,100	7,000	3,100	53,300	**525,000**
Mutsu	2,570	580	1,040	10,900	**90,000**
Northern Spy	5,090	3,500	1,310	40,100	**350,000**
Paula Red	9,810	3,530	540	12,900	**190,000**
Red Delicious (regular)	4,600	13,400	3,500	48,800	**380,000**
Red Delicious (sport)	43,600	10,800	14,000	96,600	**1,520,000**
RI Greening	290	1,240	1,240	24,900	**62,000**
Rome (regular)	20,300	7,190	1,950	41,200	**430,000**
Rome (sport)	12,900	1,900	420	35,100	**250,000**
Spartan	7,990	0	0	6,430	**69,000**
Winesap	5,290	220	320	16,300	**85,000**
Others	19,600	2,090	2,410	37,700	**190,000**
Total	**470,000**	**117,000**	**55,000**	**770,000**	**7,800,000**

Table 9.-Apples, rootstocks: Acres and trees by district

Rootstock	Northwest		Oceana-Mason		Grand Rapids	
	Acres	Trees	Acres	Trees	Acres	Trees
Seedling	1,900	100,000	1,260	80,400	5,940	343,000
111	820	112,000	930	134,000	4,170	566,000
106	1,640	218,000	650	87,600	2,320	352,000
7(VII)	490	73,000	900	144,000	5,100	801,000
26	480	104,000	60	11,000	2,260	564,000
Mark	150	42,400	130	49,700	500	206,000
9(IX)	50	17,500	30	8,600	590	228,000
Interstem	30	4,400	10	1,300	130	33,300
Others	20	3,700	110	12,400	100	14,700
Unknown	1,520	185,000	920	111,000	1,890	272,000
Total	**7,100**	**860,000**	**5,000**	**640,000**	**23,000**	**3,380,000**

Table 10.-Apples: Farms with other fruit acres by size group

Size groups	Apples		Apricots		Blueberries		Brambles		Cherries, sweet		Cherries, tart	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
1-9 acres	415	1,700	20	30	25	450	36	75	110	1,500	140	4,000
10-29 acres	350	6,000	14	20	23	1190	15	25	105	1,280	150	4,600
30-99 acres	329	17,700	22	30	12	140	15	65	100	1,290	177	9,400
100-199 acres	117	15,500	8	20	4	20	8	35	35	670	59	4,200
200 acres or more	49	17,100	5	10	0	0	2	50	18	860	32	4,600
Total	**1,260**	**58,000**	**69**	**110**	**64**	**1,800**	**76**	**250**	**368**	**5,600**	**558**	**26,800**

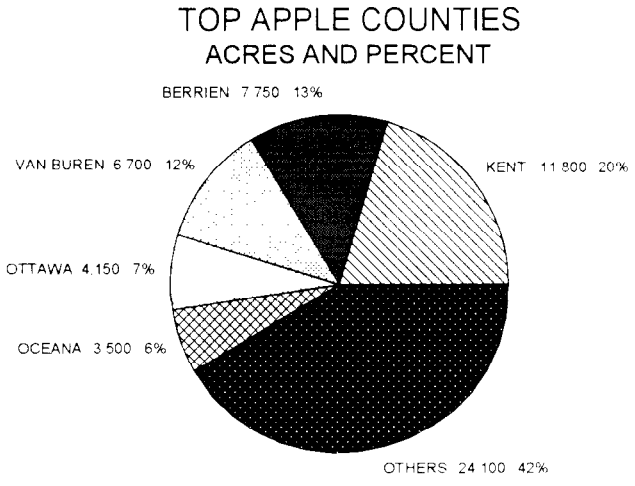


Table 9.-Apples, rootstocks: Acres and trees by district (continued)

Rootstock	Southwest		East		Total	
	Acres	Trees	Acres	Trees	**Acres**	**Trees**
Seedling	5,220	302,000	1,480	62,600	**15,800**	**888,000**
111	3,850	483,000	430	55,000	**10,200**	**1,350,000**
106	2,710	401,000	620	71,400	**7,940**	**1,130,000**
7(VII)	2,900	417,000	810	115,000	**10,200**	**1,550,000**
26	740	210,000	650	141,000	**4,190**	**1,030,000**
Mark	320	102,000	130	39,900	**1,230**	**440,000**
9(IX)	430	162,000	320	53,900	**1,420**	**470,000**
Interstem	120	17,900	310	60,100	**600**	**117,000**
Others	130	18,100	60	6,100	**420**	**55,000**
Unknown	1,180	147,000	490	55,000	**6,000**	**770,000**
Total	**17,600**	**2,260,000**	**5,300**	**660,000**	**58,000**	**7,800,000**

Table 10.-Apples: Farms with other fruit acres by size group (continued)

Size groups	Grapes		Nectarines		Peaches		Pears		Plums	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
1-9 acres	70	830	20	20	135	660	47	95	54	170
10-29 acres	38	570	17	20	136	1420	59	205	69	280
30-99 acres	46	1370	29	85	140	2020	75	440	97	610
100-199 acres	10	350	11	60	48	1290	21	120	35	350
200 acres or more	4	230	6	25	26	910	7	140	18	240
Total	**168**	**3,350**	**83**	**210**	**485**	**6,300**	**209**	**1,000**	**273**	**1,650**

Table 11.-Other varieties grown

Variety	Acres	Trees
Akane(Prime Red)	14	1,500
Baldwin	8	300
Braeburn	75	28,000
Connell Red	13	1,300
Criterion	8	1,300
Earligold	55	9,300
Early Blaze	14	1,150
Elstar	18	7,000
Fenton	20	1,250
Ginger Gold	76	24,000
Golden Russet	3	550
Granny Smith	130	18,500
Grimes Golden	89	2,650
Honey Crisp	4	1,050
Jersey Mac	130	18,500
Jonafree	22	2,500
Liberty	5	600
Lodi	15	1,700
Macoun	4	500
Mollies Delicious	3	450
Newton Pippen	2	300
Ozark Gold	55	7,100
Redfree	12	1,700
Snow	14	950
Spy Gold	8	950
Steele Red	10	350
Transparent	6	250
Tydeman Red	13	1,300
Viking	17	900
Vista Bella	3	450
Wagner	9	550
Wayne	36	4,000
Wealthy	40	1,300
Winter Banana	55	5,900
Wolf River	14	900
Others	330	41,000
Total	**1,330**	**190,000**

Table 12.-Apples: Acres by district and year planted

Year planted	North-West	Mason-Oceana	Grand Rapids	South-West	East	Total
1959 and before	1,580	740	3,640	3,960	1,280	**11,200**
1960-1964	440	310	1,540	1,810	600	**4,700**
1965-1969	740	470	1,500	1,500	410	**4,620**
1970-1974	560	300	2,570	1,810	360	**5,600**
1975	90	130	460	520	100	**1,300**
1976	80	60	510	370	100	**1,120**
1977	120	130	420	310	130	**1,110**
1978	160	190	690	170	190	**1,400**
1979	90	120	460	260	140	**1,070**
1980	370	250	930	470	240	**2,260**
1981	200	100	790	540	110	**1,740**
1982	380	140	940	710	140	**2,310**
1983	390	130	920	580	150	**2,170**
1984	310	130	920	680	160	**2,200**
1985	270	240	640	390	190	**1,730**
1986	160	150	680	370	150	**1,510**
1987	170	140	900	520	170	**1,900**
1988	130	110	710	350	50	**1,350**
1989	190	160	820	390	150	**1,710**
1990	250	230	760	370	90	**1,700**
1991	180	240	700	420	160	**1,700**
1992	80	300	600	370	100	**1,450**
1993	80	100	480	330	60	**1,050**
1994	80	130	420	400	70	**1,100**
Total	**7,100**	**5,000**	**23,000**	**17,600**	**5,300**	**58,000**

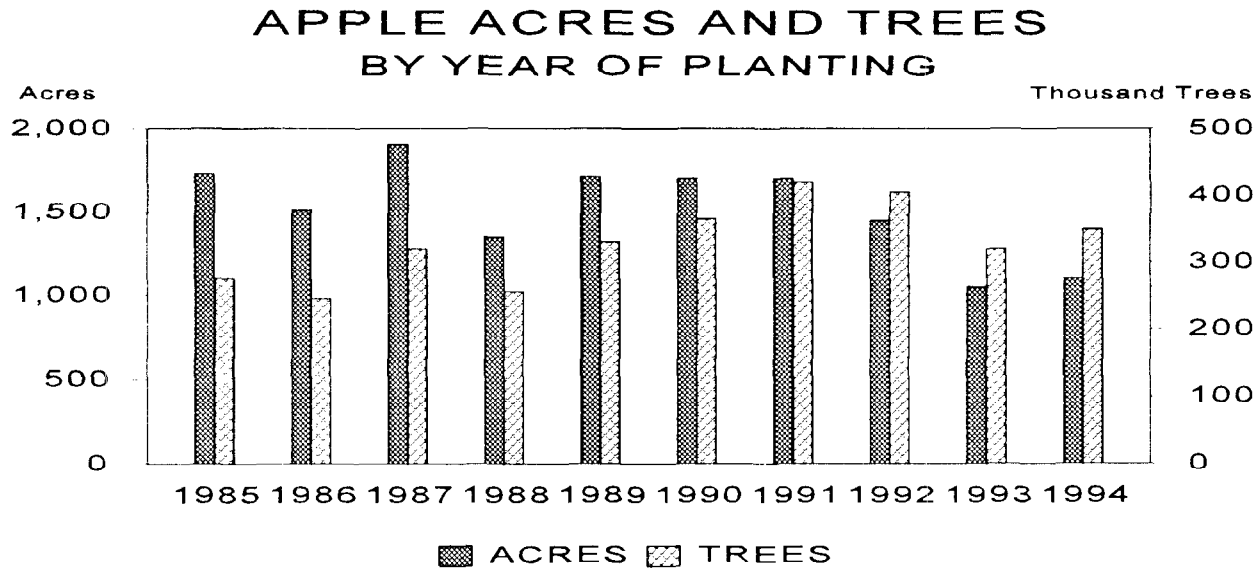
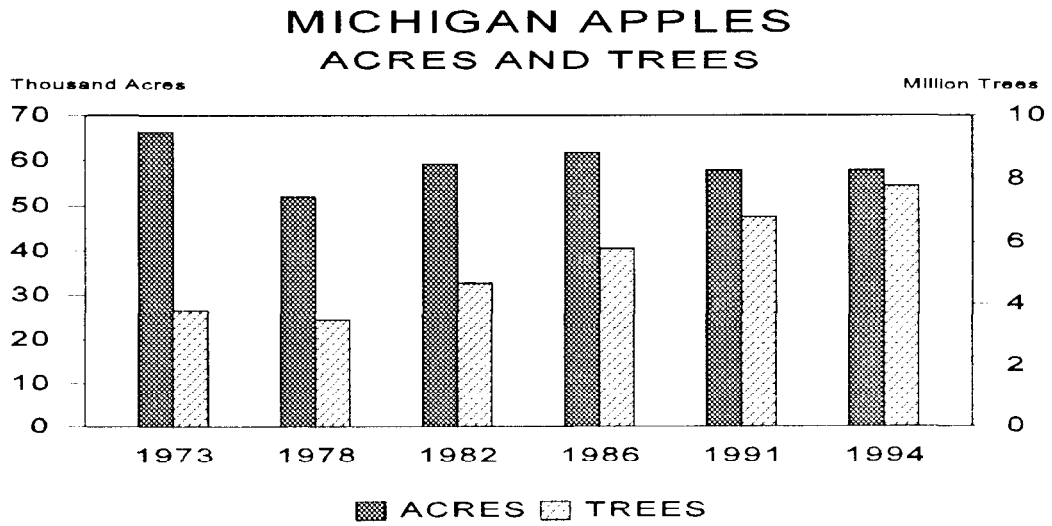


Table 13.-Apples: Trees by district and year planted

Year planted	North-West	Mason-Oceana	Grand Rapids	South-West	East	**Total**
1959 and before	62,300	34,700	173,000	190,000	50,000	**510,000**
1960-1964	36,000	26,000	120,000	160,000	43,000	**385,000**
1965-1969	79,900	48,500	160,000	160,000	41,600	**490,000**
1970-1974	65,000	36,000	320,000	220,000	39,000	**680,000**
1975	12,000	14,800	61,000	67,200	15,000	**170,000**
1976	11,000	8,200	71,000	48,300	16,500	**155,000**
1977	16,400	17,000	57,000	42,900	21,700	**155,000**
1978	21,500	23,800	97,000	23,500	29,200	**195,000**
1979	12,300	14,900	64,000	35,500	23,300	**150,000**
1980	50,000	34,900	143,000	72,000	40,100	**340,000**
1981	28,500	13,900	118,000	84,000	15,600	**260,000**
1982	55,000	19,500	138,000	117,000	20,500	**350,000**
1983	60,000	18,500	136,000	92,900	22,600	**330,000**
1984	47,000	19,300	145,000	110,000	23,700	**345,000**
1985	44,000	33,500	105,000	63,800	28,700	**275,000**
1986	26,300	22,800	112,000	60,300	23,600	**245,000**
1987	28,500	20,800	157,000	84,500	29,200	**320,000**
1988	23,400	16,000	150,000	56,100	9,500	**255,000**
1989	34,600	24,900	166,000	70,500	34,000	**330,000**
1990	47,700	38,600	177,000	79,700	22,000	**365,000**
1991	40,000	39,000	201,000	97,000	43,000	**420,000**
1992	18,500	67,000	206,000	86,800	26,700	**405,000**
1993	18,800	20,500	159,000	102,000	19,700	**320,000**
1994	21,300	26,900	144,000	136,000	21,800	**350,000**
Total	**860,000**	**640,000**	**3,380,000**	**2,260,000**	**660,000**	**7,800,000**



Apricots

Acres of apricots dwindled to 120, half the 1986 area. The number of commercial fruit farmers growing apricots fell to 79. Half the 14,000 trees were Goldcots.

Table 1.-Apricots: Number of farms and acres by district, 1982-1994

District	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Northwest	38	42	37	22	113	120	96	50
West Central	22	31	27	18	38	50	32	35
Southwest	37	62	55	35	48	60	47	33
East	12	12	6	4	8	10	5	2
Total	**109**	**147**	**125**	**79**	**207**	**240**	**180**	**120**

Table 2.-Apricots: Acres and farms by size group

Size group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-4 acres	133	117	74	140	100	75
5-9 acres	10	5	3	55	30	20
10 or more acres	4	3	2	45	50	25
Total	**147**	**125**	**79**	**240**	**180**	**120**

Table 3.-Apricots: Acres and trees by year planted

Year planted	Acres	Trees
1980 and before	45	4,900
1981-1985	41	4,800
1986-1990	27	3,400
1991-1994	7	900
Total	**120**	**14,000**

Table 4.-Apricots: Acres and trees by variety

Variety	Acres	Trees
Goldcot	60	7,100
Harglow	11	1,400
Veecot	4	500
Others	20	2,000
Unknown	25	3,000
Total	**120**	**14,000**

Blueberries

Blueberry acres climbed to 17,800, up 5 percent from 1991. The 1991 acreage was revised from 16,400 to 17,000. The number of blueberry growers has remained constant.

Van Buren, Ottawa and Allegan Counties contained 83 percent of the land in blueberries. Sixty-five percent of the blueberry acres were irrigated or able to be irrigated.

The four top varieties, in order, were Bluecrop, Jersey, Rubel and Elliott. They accounted for 84 percent of acres.

Table 1.-Blueberries: Number of farms and acres by county and district, 1975-1994

County and district	Farms				Acres			
	1975	1986	1991	1994	1975	1986	1991	1994
Northwest	*	**4**	**9**	**10**	*	**25**	**30**	**30**
Muskegon	38	36	35	34	450	930	1,150	1,090
Ottawa	130	137	130	128	3,200	4,540	5,250	5,550
Others	17	17	20	23	250	230	250	280
West Central	**185**	**190**	**185**	**185**	**3,900**	**5,700**	**6,650**	**6,920**
Allegan	73	84	90	92	1,100	1,770	2,450	2,700
Berrien	80	78	77	74	750	960	1,000	985
Van Buren	200	222	216	202	3,500	5,110	6,300	6,560
Others	5	6	6	5	50	50	50	55
Southwest	**358**	**390**	**389**	**373**	**5,400**	**7,890**	**9,800**	**10,300**
East	**37**	**40**	**53**	**57**	**400**	**485**	**520**	**550**
Total	**580**	**624**	**636**	**625**	**9,700**	**14,100**	**17,000**	**17,800**

*Included in **East** in 1975

Table 2.-Blueberries: Number of farms and acres by size group

Size Groups	Farms			1986		
	1986	1991	1994	1986	1991	1994
1-9 acres	330	316	280	1,260	1,250	1,200
10-29 acres	168	177	185	2,680	2,900	3,050
30-99 acres	98	112	130	5,250	6,400	7,250
100-199 acres	23	25	22	3,090	3,500	3,050
200 acres or more	5	8	8	1,820	2,950	3,250
Total	**624**	**638**	**625**	**14,100**	**17,000**	**17,800**

Table 3.-Blueberries: Acres by variety and district

Variety	District			
	Northwest and East	West Central	Southwest	**Total**
Berkeley	15	65	120	**200**
Bluecrop	90	2,280	2,260	**4,630**
Bluejay	5	65	160	**230**
Blueray	150	310	140	**600**
Bluetta	2	88	100	**190**
Burlington	2	70	88	**160**
Collins	5	25	30	**60**
Duke	0	80	140	**220**
Earliblue	14	25	51	**90**
Elliott	10	780	530	**1,320**
Jersey	150	2,300	4,980	**7,430**
Northland	14	25	61	**100**
Patriot	30	40	70	**140**
Pemberton	3	37	10	**50**
Rancocas	15	5	140	**160**
Rubel	10	470	1,120	**1,600**
Spartan	15	40	35	**90**
Weymouth	0	25	25	**50**
Other	20	70	130	**220**
Unknown	30	120	110	**260**
Total	**580**	**6,920**	**10,300**	**17,800**

Table 4.-Blueberries: Other varieties grown

Variety	Acres
Coville	40
Nelson	35
Stanley	35
Others	110
Total	**220**

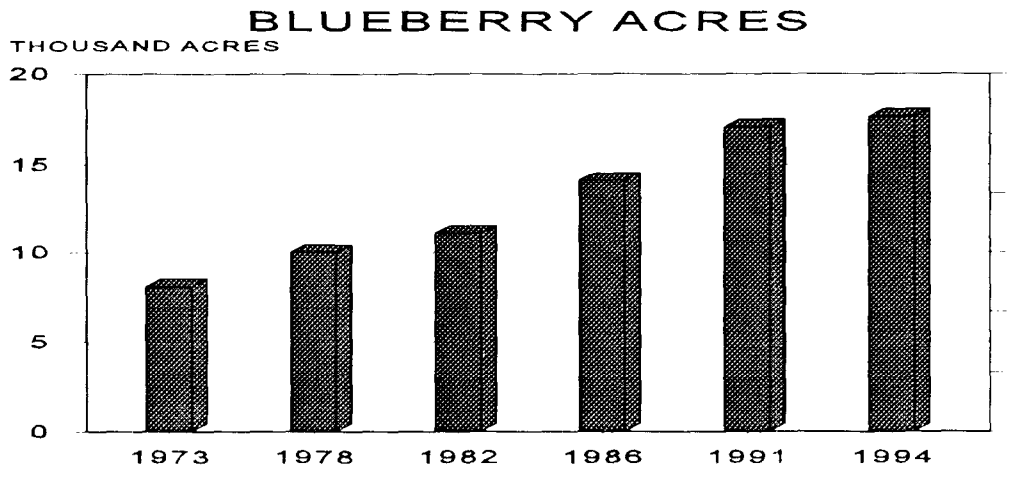


Table 5.-Blueberries: Acres by variety and year planted

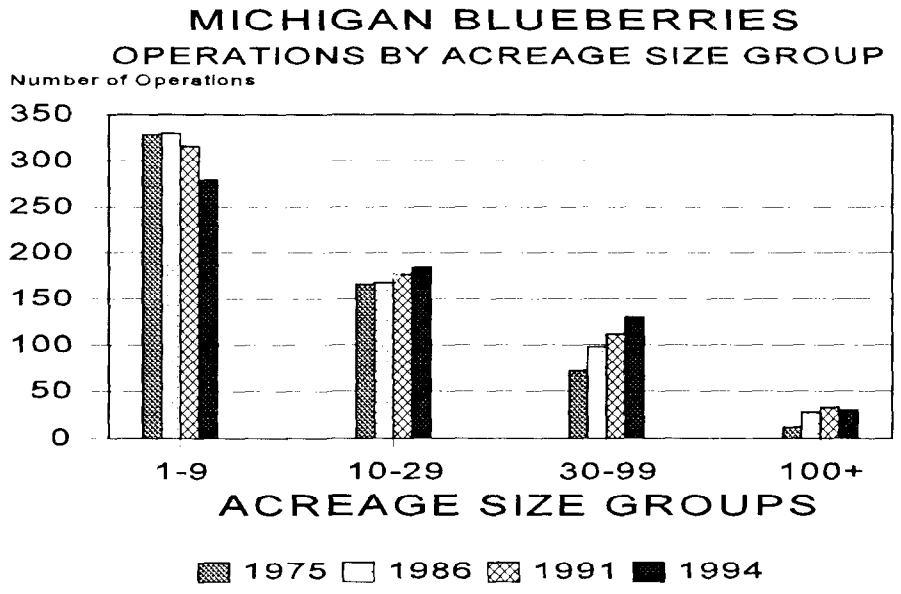
Year planted	Variety						
	Berkeley	Bluecrop	Bluejay	Blueray	Bluetta	Burlington	Collins
1964 and earlier	75	600	2	170	23	23	7
1965-1969	26	390	7	91	14	12	3
1970-1974	54	670	16	130	34	30	23
1975-1979	26	560	20	60	51	13	17
1980-1984	2	880	54	41	19	43	1
1985-1989	13	1,060	87	76	33	18	7
1990	0	150	20	10	0	1	2
1991	0	120	10	5	3	1	0
1992	0	97	13	10	0	1	0
1993	2	60	0	1	13	8	0
1994	2	43	1	6	0	10	0
Total	**200**	**4,630**	**230**	**600**	**190**	**160**	**60**

Year planted	Variety						
	Duke	Earliblue	Elliott	Jersey	Northland	Patriot	Pemberton
1964 and earlier	0	40	13	3,930	3	8	30
1965-1969	0	8	17	610	0	2	6
1970-1974	0	11	14	650	1	0	10
1975-1979	0	21	63	660	7	17	3
1980-1984	0	4	290	880	38	24	0
1985-1989	42	4	480	510	38	72	1
1990	4	1	130	29	0	5	0
1991	17	1	93	26	0	8	0
1992	12	0	48	45	0	2	0
1993	95	0	100	66	1	2	0
1994	50	0	72	24	12	0	0
Total	**220**	**90**	**1,320**	**7,430**	**100**	**140**	**50**

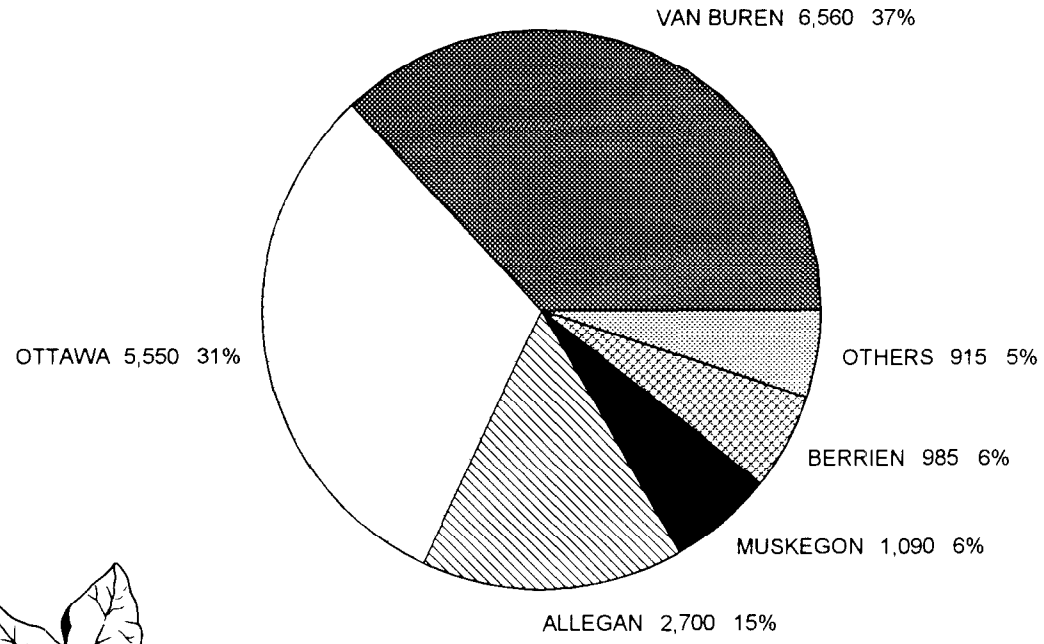
Year planted	Variety						
	Rancocas	Rubel	Spartan	Weymouth	Others	Unknown	**Total**
1964 and earlier	83	1,030	10	18	85	140	**6,290**
1965-1969	4	100	0	14	11	25	**1,340**
1970-1974	20	100	0	4	17	16	**1,800**
1975-1979	18	44	12	1	12	15	**1,620**
1980-1984	8	140	32	8	11	35	**2,510**
1985-1989	27	93	27	5	12	25	**2,630**
1990	0	25	1	0	0	2	**380**
1991	0	45	5	0	15	1	**350**
1992	0	13	0	0	9	0	**250**
1993	0	8	0	0	33	1	**390**
1994	0	2	3	0	15	0	**240**
Total	**160**	**1,600**	**90**	**50**	**220**	**260**	**17,800**

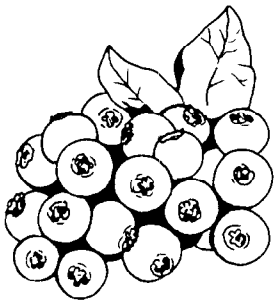
Table 6.-Blueberries: Irrigated and non-irrigated acres by variety

Variety	Irrigated	Not irrigated	Total
Berkeley	110	90	200
Bluecrop	3,350	1,280	4,630
Bluejay	170	60	230
Blueray	420	180	600
Bluetta	150	40	190
Burlington	90	70	160
Collins	30	30	60
Duke	100	120	220
Earliblue	40	50	90
Elliott	840	480	1,320
Jersey	4,600	2,830	7,430
Northland	70	30	100
Patriot	100	40	140
Pemberton	30	20	50
Rancocas	70	90	160
Rubel	1,000	600	1,600
Spartan	80	10	90
Weymouth	40	10	50
Other	90	130	220
Unknown	220	40	260
Total	**11,600**	**6,200**	**17,800**

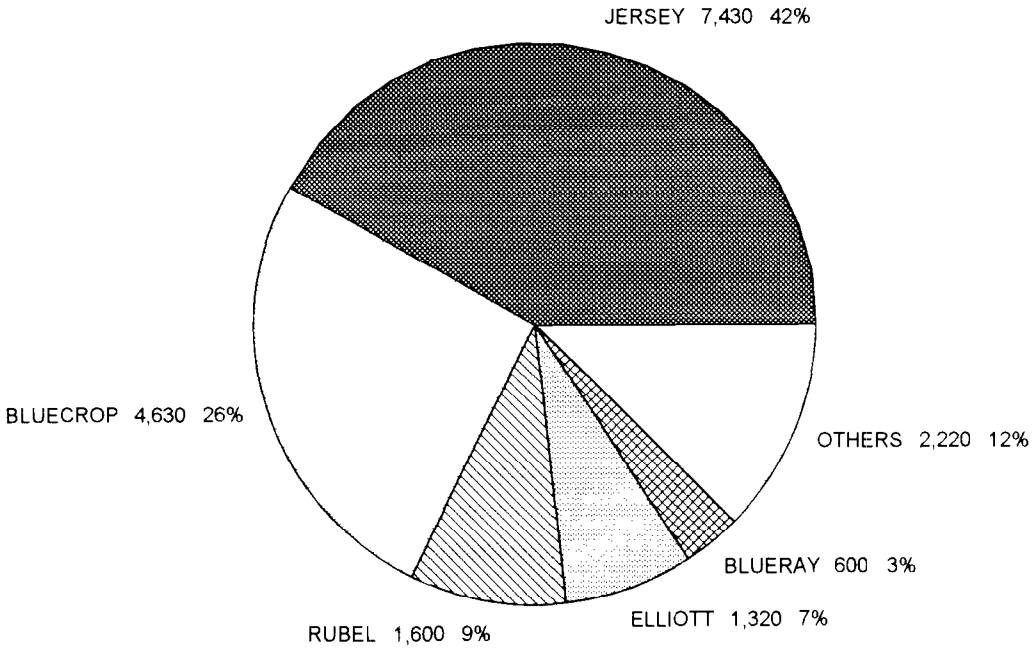


TOP BLUEBERRY COUNTIES
ACRES AND PERCENTS





BLUEBERRY VARIETIES
ACRES AND PERCENTS



Brambles

There were 500 acres of brambles grown commercially in 1994, down from 540 in 1991. The total was composed of 350 acres of red raspberries, 110 acres of black raspberries, 25 acres of purple raspberries and 15 acres of blackberries. The number of growers increased slightly. Unlike the other fruit in this survey, bramble production is not concentrated by size of grower or by geographic area.

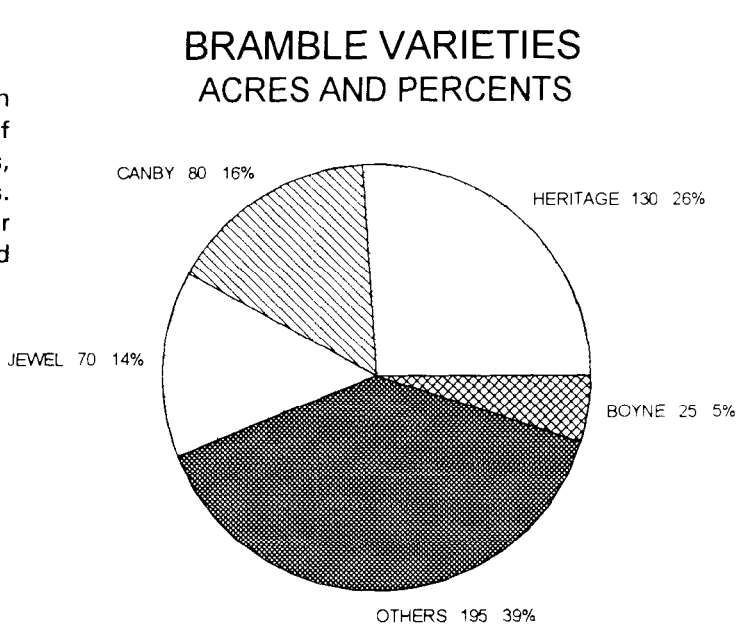


Table 1.-Brambles: Number of farms and acres by county and district

County and district	Farms		Acres	
	1991	1994	1991	1994
Northwest	**20**	**22**	**30**	**30**
West Central	**18**	**18**	**35**	**40**
Berrien	28	33	100	130
Others	22	24	65	70
Southwest	**50**	**57**	**165**	**200**
Jackson and Washtenaw	5	5	85	20
Livingston and Oakland	9	7	65	50
Others	53	53	160	160
East	**67**	**65**	**310**	**230**
Total	**155**	**162**	**540**	**500**

Table 2.-Brambles: Number of farms and acres by size group

Size group	Farms		Acres	
	1991	1994	1991	1994
1-4 acres	124	128	170	170
5-9 acres	20	21	120	130
10 or more acres	11	13	250	200
Total	**155**	**162**	**540**	**500**

Table 3.-Brambles: Acres by variety and year planted

Year planted	Bristol	Boyne	Canby	Chillo-wack	Heritage	Jewel	Latham	Others	**Total**
1979 and before	2	0	7	0	7	1	5	18	**40**
1980-1984	9	0	25	1	66	1	5	43	**150**
1985-1989	0	19	33	4	31	49	7	17	**160**
1990	4	5	2	4	13	4	2	8	**42**
1991	1	1	3	2	7	1	0	13	**28**
1992	0	0	2	6	1	13	1	6	**29**
1993	0	0	1	1	2	0	0	11	**15**
1994	4	0	7	2	3	1	0	19	**36**
Total	**20**	**25**	**80**	**20**	**130**	**70**	**20**	**135**	**500**

Table 4.-Brambles: Acres by variety and district

Variety	Northwest and West Central	East	Southwest	**Total**
Bristol	1	1	18	**20**
Boyne	0	9	16	**25**
Canby	10	50	20	**80**
Chillowack	5	8	7	**20**
Heritage	8	90	32	**130**
Jewel	3	5	62	**70**
Latham	13	5	2	**20**
Others	30	62	43	**135**
Total	**70**	**230**	**200**	**500**

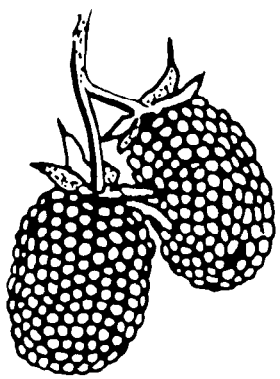


Table 5.-Brambles: Other varieties grown

Variety	Acres
Autumn Bliss	6
Black Hawk	7
Black Satin	2
Brandywine	3
Chester	2
Cumberland	1
Darrow	1
Hull	1
Lowden Purple	6
Mammoth	4
Newburgh	4
Redwing	1
Royalty	14
Ruby	1
Taylor	1
Thornfree	5
Titan	11
Others	65
Total	**135**

Cherries, sweet

Acres planted to sweet cherries dropped 6 percent since 1991, and the number of trees fell by 7 percent. Almost 65 percent of the acres were in Leelanau and Grand Traverse Counties.

Sweet cherry production is concentrated by grower size also. Over half the acres are on the largest 15 percent of sweet cherry farms.

Golds, Emperor Francis and Napoleon were the three most prevalent varieties. Light sweets accounted for more than 60 percent of total acreage.

Table 1.-Cherries, sweet: Number of farms and acres by county and district, 1982-1994

County & district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Antrim[1]	45	46	39	34	910	1,040	950	880
Benzie	44	38	31	22	490	620	360	350
Grand Traverse	153	134	108	98	2,880	2,540	2,060	1,750
Leelanau	189	173	152	145	4,080	4,360	3,800	3,750
Manistee	35	32	25	26	450	320	300	270
Northwest	**466**	**423**	**355**	**325**	**8,810**	**8,880**	**7,470**	**7,000**
Kent	24	24	16	13	35	100	40	40
Mason	37	35	27	25	570	580	500	480
Oceana	71	60	50	41	730	610	560	540
Ottawa	14	12	11	10	65	60	50	40
Others	13	17	18	13	50	50	50	30
West Central	**159**	**148**	**122**	**102**	**1,450**	**1,400**	**1,200**	**1,130**
Allegan	14	18	14	10	35	30	40	35
Berrien	66	79	59	61	190	210	180	160
Van Buren	25	26	22	21	100	110	75	75
Others	3	7	8	5	15	15	15	10
Southwest	**108**	**130**	**103**	**97**	**340**	**365**	**310**	**280**
East	**42**	**30**	**56**	**41**	**245**	**150**	**70**	**90**
Ttotal	**775**	**731**	**636**	**565**	**10,845**	**10,795**	**9,050**	**8,500**

[1]Includes Charlevoix, Cheboygan and Emmet.

Table 2.-Cherries, sweet: Number of farms and acres by size group

Size group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-9 acres	415	358	301	1,290	1,120	980
10-29 acres	218	192	182	3,510	3,440	3,150
30-99 acres	90	80	73	4,110	3,610	3,070
100 or more acres	8	6	9	1,790	880	1,300
Total	**731**	**636**	**565**	**10,700**	**9,050**	**8,500**

Table 3.-Cherries, sweet: Acres by variety and year planted

Year planted	Cavalier	Emperor Francis	Gold	Hardy Giant	Hedel-Fingen	Napoleon	Nelson	Ranier
1959 and before	0	38	87	22	49	176	1	0
1960-1964	0	108	106	9	129	231	3	5
1965-1969	0	148	98	17	72	91	2	4
1970-1974	0	185	94	21	53	192	1	21
1975	0	33	62	1	44	40	0	11
1976	6	37	43	0	11	69	3	14
1977	9	72	24	4	14	23	1	5
1978	0	71	100	2	16	80	0	13
1979	3	75	140	5	36	109	1	19
1980	9	102	223	0	46	133	4	35
1981	4	62	144	2	14	20	9	37
1982	19	46	118	0	18	66	4	20
1983	3	65	70	1	14	23	25	2
1984	17	66	64	0	4	26	3	2
1985	5	60	62	2	31	42	3	13
1986	10	27	96	1	5	35	0	10
1987	2	59	52	2	10	21	0	1
1988	10	93	115	2	20	11	0	20
1989	14	53	124	0	18	19	0	17
1990	21	34	94	3	16	15	0	10
1991	7	38	28	1	14	8	0	22
1992	4	15	8	0	2	3	0	0
1993	2	11	17	0	7	2	0	7
1994	5	42	81	0	17	15	0	2
Total	**150**	**1,540**	**2,050**	**95**	**660**	**1,450**	**60**	**290**

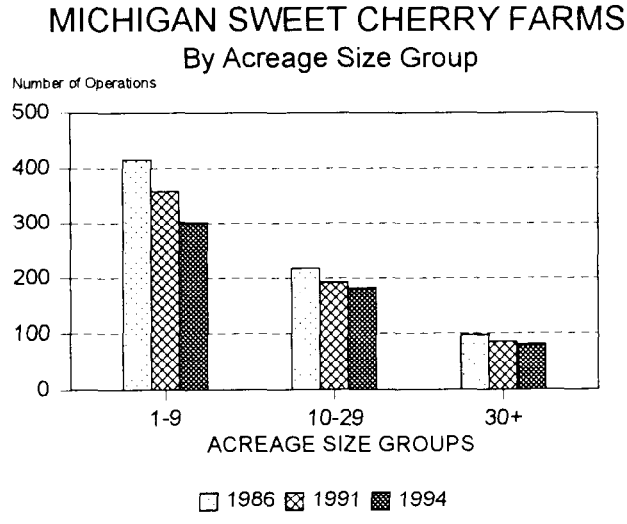


Table 3.-Cherries, sweet: Acres by variety and year planted (continued)

Year planted	Sam	Schmidt	Ulster	Van	Windsor	Other	Unknown	Total
1959 and before	3	168	0	6	44	2	14	**610**
1960-1964	17	160	0	21	52	4	25	**870**
1965-1969	20	89	7	5	24	15	8	**600**
1970-1974	25	84	19	8	11	20	16	**750**
1975	9	16	0	0	2	6	6	**230**
1976	10	6	0	1	5	0	5	**210**
1977	6	6	0	2	0	0	4	**170**
1978	9	2	4	4	0	10	39	**350**
1979	15	36	3	3	0	1	34	**480**
1980	28	33	6	2	2	12	25	**660**
1981	27	24	21	1	0	2	3	**370**
1982	29	8	3	2	1	4	2	**340**
1983	47	4	14	0	1	2	9	**280**
1984	26	9	41	0	0	1	1	**260**
1985	17	41	26	5	0	1	12	**320**
1986	13	11	11	0	3	1	7	**230**
1987	26	2	37	6	0	5	7	**230**
1988	15	6	45	7	0	5	1	**350**
1989	22	3	73	34	0	9	4	**390**
1990	5	6	33	4	0	9	0	**250**
1991	7	4	31	3	3	3	1	**170**
1992	5	10	18	1	0	14	0	**80**
1993	2	1	16	4	0	11	0	**80**
1994	17	1	22	1	2	13	2	**220**
Total	**400**	**730**	**430**	**120**	**150**	**150**	**225**	**8,500**

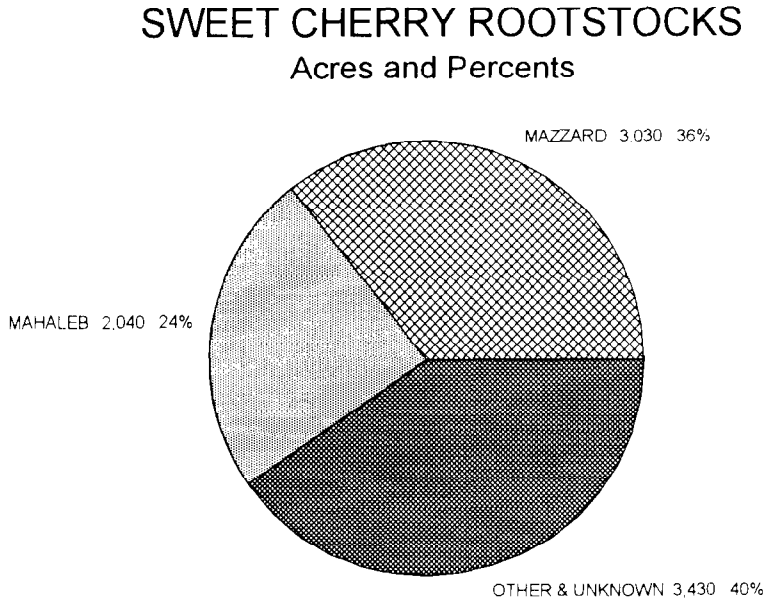


Table 4.-Cherries, sweet: Number of trees by variety and year planted

Year planted	Cavalier	Emperor Francis	Gold	Hardy Giant	Hedel-fingen	Napoleon	Nelson	Ranier
1959 or before	0	2,900	6,620	1,900	3900	14,000	80	0
1960-1964	0	8,150	8,740	800	10,300	19,900	260	450
1965-1969	0	11,600	8,040	1,540	6,000	8,090	170	340
1970-1974	0	15,800	8,000	2,000	4,600	17,000	90	1,920
1975	0	3,200	6,000	90	3,600	3,400	0	990
1976	510	3,300	4,200	0	920	5,760	270	1,310
1977	780	6,560	2,350	350	1,220	2,100	90	480
1978	0	7,000	9,640	180	1,470	7,700	0	1,240
1979	270	7,170	13,500	470	3,170	10,000	90	1,790
1980	880	9,400	22,000	0	4,330	12,600	370	3,400
1981	370	5,780	14,500	190	1,360	1,800	800	3,710
1982	1,890	4,500	11,500	0	1,670	5,700	360	1,920
1983	280	6,340	7,100	90	1,280	2,050	2,440	190
1984	1,650	6,240	6,500	0	360	2,400	290	190
1985	480	5,900	6,300	190	3,000	3,940	290	1,290
1986	890	2,650	10,500	100	480	3,300	0	1,030
1987	190	5,600	5,400	210	930	2,000	0	110
1988	970	8,900	12,500	220	1,880	1,050	0	2,110
1989	1,400	5,200	12,800	0	1,760	1,890	0	1,990
1990	2,030	3,350	9,400	360	1,450	1,500	0	1,070
1991	750	3,650	2,840	110	1,380	790	C	2,410
1992	430	1,470	890	0	210	310	0	0
1993	220	1,140	1,880	0	720	220	0	810
1994	510	4,200	8,800	0	1,610	1,500	0	250
Total	**14,500**	**140,000**	**200,000**	**8,800**	**57,600**	**129,000**	**5,600**	**29,000**

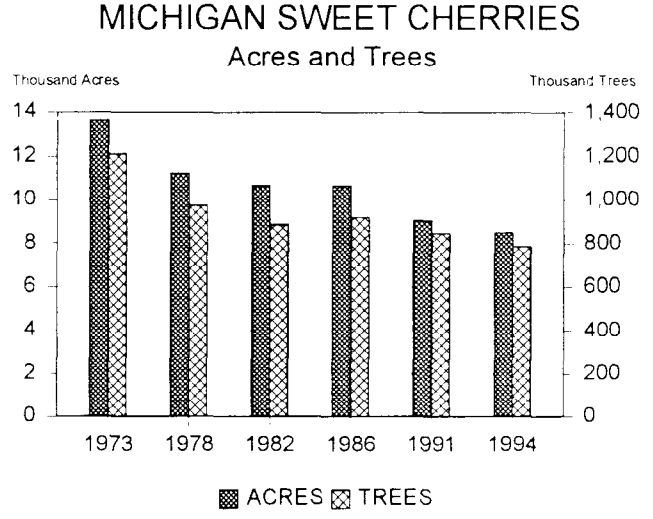


Table 4.-Cherries, sweet: Number of trees by variety and year planted (continued)

Year planted	Sam	Schmidt	Ulster	Van	Windsor	Other	Unknown	Total
1959 or before	250	12,000	0	500	3,300	150	1,100	**46,700**
1960-1964	1,400	12,700	0	1,870	4,100	280	1,950	**70,900**
1965-1969	1,650	7,700	600	430	1,810	1,050	680	**49,700**
1970-1974	2,150	7,180	1,750	710	850	1,400	1,650	**65,100**
1975	810	1,480	0	0	170	430	630	**20,800**
1976	880	550	0	90	390	0	420	**18,600**
1977	550	550	0	190	0	0	380	**15,600**
1978	840	180	360	390	0	800	3,900	**33,700**
1979	1,400	3,100	290	260	0	90	3,900	**45,500**
1980	2,640	2,800	580	190	170	940	2,400	**62,700**
1981	2,580	2,210	2,100	90	0	180	330	**36,000**
1982	2,750	690	300	180	80	290	170	**32,000**
1983	4,500	360	1,420	0	90	160	900	**27,200**
1984	2,700	830	4,250	0	0	90	100	**25,600**
1985	1,750	3,400	2,650	520	0	90	1,200	**31,000**
1986	1,300	950	1,160	0	270	90	680	**23,400**
1987	2,650	180	3,820	650	0	420	740	**22,900**
1988	1,510	530	4,550	750	0	430	100	**35,500**
1989	2,300	270	7,930	3,600	0	850	410	**40,400**
1990	550	500	3,500	440	0	850	0	**25,000**
1991	740	390	3,220	330	270	300	120	**17,300**
1992	610	930	1,900	110	0	1,140	0	**8,000**
1993	240	110	1,690	480	0	890	0	**8,400**
1994	1,950	110	2,330	120	200	1,180	240	**23,000**
Total	**38,700**	**59,700**	**44,400**	**11,900**	**11,700**	**12,100**	**22,000**	**785,000**

SWEET CHERRY VARIETIES
ACRES AND PERCENTS

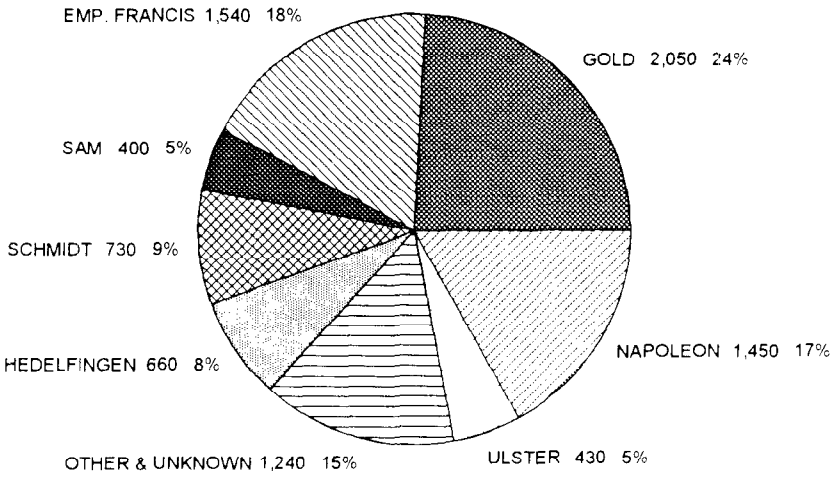


Table 5.-Cherries, sweet: Acres and trees by variety and district

Varity	Northwest		West Central		Southwest		East		Total	
	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees
Cavalier	115	11,200	24	2,200	9	900	2	200	**150**	**14,500**
Emperor Francis	1,440	131,000	94	8,400	5	500	1	100	**1,540**	**140,000**
Gold	1,600	155,000	440	44,000	3	300	7	700	**2,050**	**200,000**
Hardy Giant	80	7,200	9	1,000	5	500	1	100	**95**	**8,800**
Hedelfingen	450	39,900	65	6,000	115	9,300	30	2,400	**660**	**57,600**
Napoleon	1,280	113,000	150	14,300	8	800	12	900	**1,450**	**129,000**
Nelson	60	5,600	0	0	0	0	0	0	**60**	**5,600**
Ranier	220	21,000	65	7,500	5	500	0	0	**290**	**29,000**
Sam	300	28,100	70	7,800	23	2,250	7	550	**400**	**38,700**
Schmidt	600	48,200	75	7,000	50	4,000	5	500	**730**	**59,700**
Ulster	390	39,700	32	3,800	5	550	3	350	**430**	**44,400**
Van	95	9,200	8	900	15	1,600	2	200	**120**	**11,900**
Windsor	110	8,700	28	2,000	9	800	3	200	**150**	**11,700**
Others	105	7,500	22	2,600	15	1,300	8	700	**150**	**12,100**
Unknown	155	15,700	48	4,500	13	1,100	9	700	**225**	**22,000**
Total	**7,000**	**641,000**	**1,130**	**112,000**	**280**	**24,400**	**90**	**7,600**	**8,500**	**785,000**

Table 6.-Cherries, sweet: Other varieties grown

Variety	Acres	Trees
Royalton	10	1,100
Stella	10	1,000
Vega	35	3,300
Vista	35	3,200
Others	60	3,500
Total	**150**	**12,100**

Table 7.-Cherries, sweet: Acres and variety by rootstock and year planted

Rootstock	Units	District				Total
		Northwest	West Central	Southwest	East	
Mahaleb	Acres	1,630	310	65	35	**2,040**
	Trees	155,000	32,400	6,400	3,200	**197,000**
Mazzard	Acres	2,550	350	100	30	**3,030**
	Trees	226,000	35,600	9,000	2,400	**273,000**
Others	Acres	50	30	5	5	**90**
	Trees	5,000	2,500	300	400	**8,200**
Unknown	Acres	2,770	440	110	20	**3,340**
	Trees	255,000	41,500	8,700	1,600	**306,800**
Total	**Acres**	**7,000**	**1,130**	**280**	**90**	**8,500**
	Trees	**641,000**	**112,000**	**24,400**	**7,600**	**785,000**

Cherries, tart

The acres planted to tart cherries declined 6 percent since 1991; the tree count slipped 10 percent as well. Annual new plantings have risen every year since 1990, but the removal of old trees out paced those new settings. Total tart cherry acres have fallen by almost 11,000 since 1982. The number of tart cherry farms has dropped by almost 40 percent during that time.

Oceana, Leelanau and Grand Traverse remained the top three tart cherry counties. They accounted for more than 57 percent of the acres. More than 98 percent of the acres were Montmorency, but plantings of the newer Galaxy variety reached 450 acres, up from 250 acres in 1991.

A new table showing the other fruits grown by tart cherry farmers was added. It shows that almost 45 percent of tart farmers also grew apples, and more than 80 percent also grew sweet cherries.

Table 1.-Cherries, tart: Number of farms and acres by county and district, 1982-1994

County and district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Antrim[1]	59	62	46	42	3,040	2,990	2,610	2,600
Benzie	62	46	36	29	2,120	1,840	1,260	1,300
Grand Traverse	167	141	117	115	6,820	6,200	4,650	4,600
Leelanau	217	193	171	164	9,450	8,740	7,730	7,700
Manistee	60	50	39	32	2,110	1,930	1,580	1,200
Northwest	**565**	**492**	**409**	**382**	**23,540**	**21,700**	**17,830**	**17,400**
Kent	41	32	14	16	830	990	620	630
Mason	44	34	31	30	2,240	2,290	1,960	1,920
Muskegon	11	14	11	10	680	770	620	520
Newaygo	11	14	10	9	480	520	430	370
Oceana	193	151	111	99	9,350	8,520	8,010	8,350
Ottawa	21	18	13	13	350	270	220	190
Others	6	9	7	4	120	190	50	20
West Central	**327**	**272**	**197**	**181**	**14,050**	**13,550**	**11,910**	**12,000**
Allegan	45	37	26	22	735	620	480	420
Berrien	235	206	147	138	3,810	3,960	3,920	3,300
Cass	19	20	12	11	440	540	430	450
Kalamazoo	16	10	9	9	200	140	170	160
Van Buren	119	98	79	70	3,700	3,340	3,270	2,130
Southwest	**434**	**371**	**273**	**250**	**8,885**	**8,600**	**8,270**	**6,460**
East	**57**	**48**	**54**	**33**	**245**	**150**	**180**	**140**
Total	**1,383**	**1,183**	**933**	**846**	**46,720**	**44,000**	**38,190**	**36,000**

[1]Includes Charlevoix, Cheboygan, and Emmet.

Table 2.-Cherries, tart: Number of farms and acres by size group

Size groups	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-9 acres	336	236	200	1,290	970	850
10-29 acres	417	320	295	7,580	5,680	5,150
30-99 acres	343	292	270	18,200	15,300	14,400
100-199 acres	61	65	57	7,990	8,500	7,600
200 acres or more	26	20	24	8,940	7,750	8,000
Total	**1,183**	**933**	**846**	**44,000**	**38,200**	**36,000**

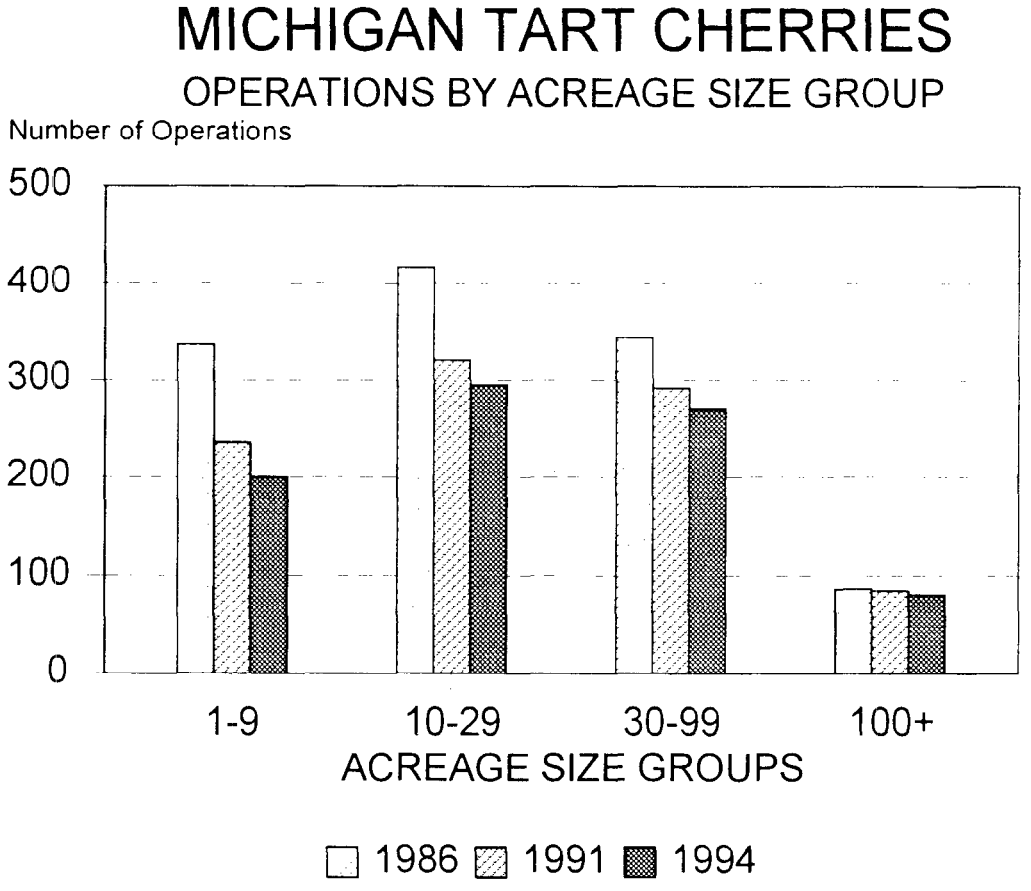


Table 3.-Cherries, tart: Trees by district and year planted

Year planted	District				
	Northwest	West Central	Southwest	East	**Total**
1969 or before	89,000	31,300	18,900	800	**140,000**
1970	51,000	20,100	10,800	400	**82,300**
1971	21,600	15,800	3,500	100	**41,000**
1972	35,000	14,700	11,100	400	**61,200**
1973	22,000	18,100	8,100	400	**48,600**
1974	39,400	40,000	23,000	300	**102,700**
1975	56,000	62,700	17,700	0	**136,400**
1976	68,000	87,200	22,800	500	**178,500**
1977	106,000	61,800	27,000	1,100	**195,900**
1978	158,000	98,100	50,000	3,500	**309,600**
1979	184,000	90,700	59,000	1,300	**335,000**
1980	189,000	117,000	63,800	300	**370,100**
1981	140,000	103,000	41,000	0	**284,000**
1982	99,000	60,300	28,000	200	**187,500**
1983	63,000	56,200	33,400	0	**152,600**
1984	85,000	32,600	51,000	600	**169,200**
1985	64,000	40,600	46,000	2,800	**153,400**
1986	74,000	49,200	27,000	1,100	**151,300**
1987	52,000	43,400	26,000	0	**121,400**
1988	50,200	26,200	16,700	0	**93,100**
1989	39,000	38,000	15,500	600	**93,100**
1990	36,300	29,300	18,000	0	**83,600**
1991	30,500	45,500	18,100	0	**94,100**
1992	49,000	36,600	17,100	0	**102,700**
1993	55,000	34,300	17,000	0	**106,300**
1994	64,000	62,300	29,500	600	156,400
Total	**1,920,000**	**1,315,000**	**700,000**	**15,000**	**3,950,000**

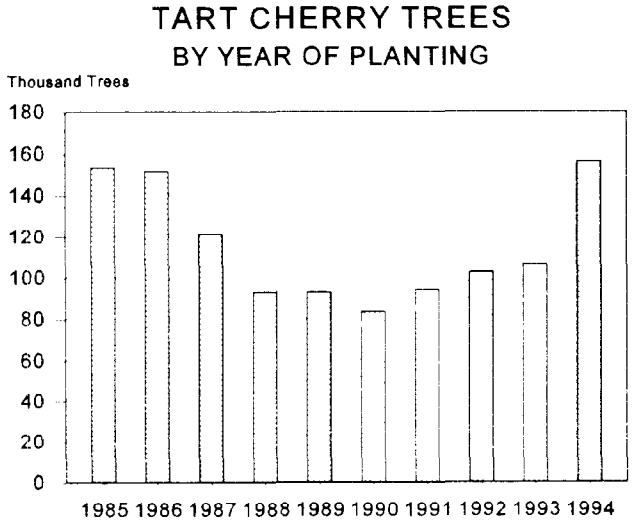


Table 4.-Cherries, tart: Acres by district and year planted

Year planted	District				
	Northwest	West Central	Southwest	East	**Total**
1969 or before	920	335	215	10	**1,480**
1970	520	206	110	4	**840**
1971	220	165	34	1	**420**
1972	350	146	110	4	**610**
1973	220	175	81	4	**480**
1974	390	397	230	3	**1,020**
1975	530	580	170	0	**1,280**
1976	650	805	210	5	**1,670**
1977	970	570	260	10	**1,810**
1978	1,450	890	470	30	**2,840**
1979	1,620	827	550	13	**3,010**
1980	1,660	1,067	600	3	**3,330**
1981	1,240	930	380	0	**2,550**
1982	880	548	260	2	**1,690**
1983	560	510	300	0	**1,370**
1984	760	294	450	6	**1,510**
1985	570	365	420	25	**1,380**
1986	660	440	240	10	**1,350**
1987	460	390	230	0	**1,080**
1988	440	235	145	0	**820**
1989	340	335	130	5	**810**
1990	310	260	160	0	**730**
1991	260	390	160	0	**810**
1992	420	320	150	0	**890**
1993	470	295	145	0	**910**
1994	530	525	250	5	**1,310**
Total	**17,400**	**12,000**	**6,460**	**140**	**36,000**

TOP TART CHERRY COUNTIES

Acres and Percent

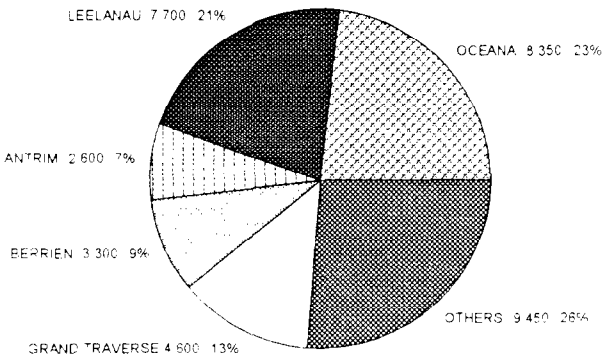


Table 5.-Cherries, tart: Acres and variety by year planted

Year planted	Variety			Total
	Montmorency	Galaxy	Others	
1978 or before	12,450	0	0	**2,840**
1979	2,965	0	45	**3,010**
1980	3,330	0	0	**3,330**
1981	2,525	0	25	**2,550**
1982	1,690	0	0	**1,690**
1983	1,370	0	0	**1,370**
1984	1,490	20	0	**1,510**
1985	1,365	15	0	**1,380**
1986	1,320	30	0	**1,350**
1987	950	129	1	**1,080**
1988	790	30	0	**820**
1989	725	76	9	**810**
1990	695	34	1	**730**
1991	785	23	2	**810**
1992	870	19	1	**890**
1993	890	19	1	**910**
1994	1,240	55	15	**1,310**
Total	**35,450**	**450**	**100**	**36,000**

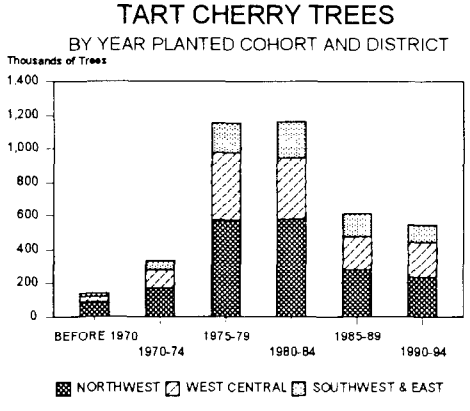


Table 6.- Cherries, tart, rootstocks: Acres and trees by district

Rootstock	Units	District				
		Northwest	West Central	Southwest	East	Total
Mahaleb	Acres	10,200	7,530	4,435	85	**22,250**
	Trees	1,140,000	838,000	483,000	9,000	**2,470,000**
Mazzard	Acres	1,750	950	485	25	**3,210**
	Trees	186,000	99,000	52,300	2,700	**340,000**
Others	Acres	120	105	80	15	**320**
	Trees	15,000	13,000	10,300	1,700	**40,000**
Unknown	Acres	5,330	3,415	1,460	15	**10,220**
	Trees	579,000	365,000	154,400	1,600	**1,100,000**
Total	**Acres**	**17,400**	**12,000**	**6,460**	**140**	**36,000**
	Trees	**1,920,000**	**1,315,000**	**700,000**	**15,000**	**3,950,000**

Table 7.-Cherries, tart: Farms with other fruit acres by size group

Size group	Cherries, tart		Apples		Apricots		Blueberries		Brambles		Cherries, sweet	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
1-9 acres	200	850	120	3,900	7	10	15	220	20	50	90	530
10-29 acres	295	5,150	185	7,100	12	20	5	30	6	25	155	1,700
30-99 acres	270	14,400	180	11,700	19	40	8	100	7	50	160	3,400
100-199 acres	57	7,600	47	5,500	8	25	0	0	2	5	35	970
200 acres or more	24	8,000	20	3,100	2	5	0	0	0	0	19	1,600
Total	**846**	**36,000**	**552**	**31,300**	**48**	**100**	**28**	**350**	**35**	**130**	**459**	**8,200**

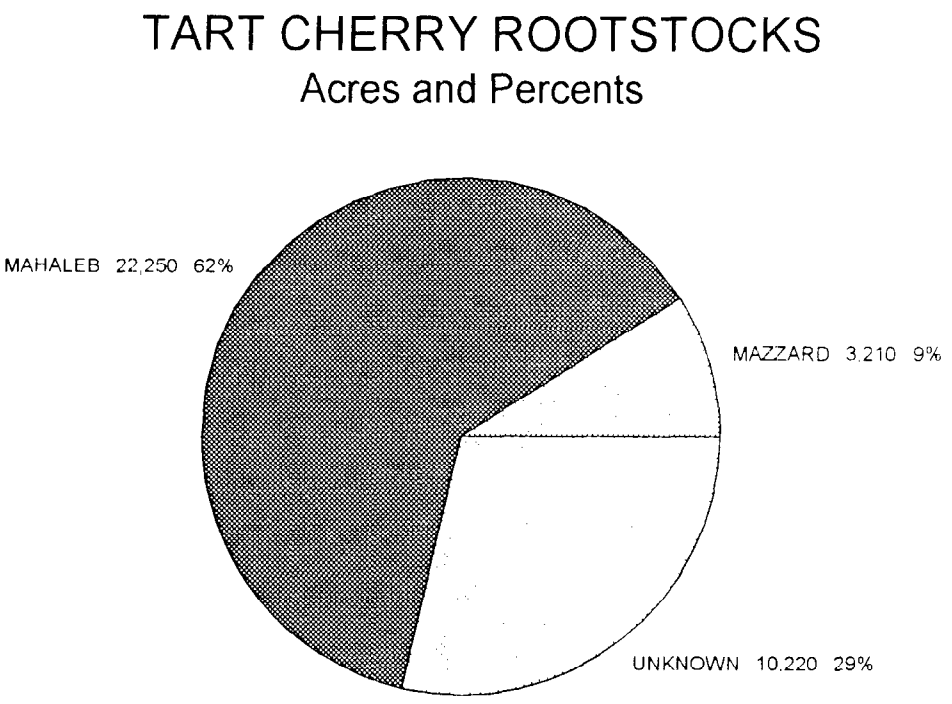


Table 7.-Cherries, tart: Farms with other fruit acres by size group (continued)

Size group	Grapes		Nectarines		Peaches		Pears		Plums	
	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres
1-9 acres	40	920	13	15	90	600	42	150	45	130
10-29 acres	43	1080	17	65	110	1430	37	200	65	270
30-99 acres	24	1420	16	70	85	1950	32	190	70	740
100-199 acres	6	280	6	20	30	830	11	80	21	300
200 acres or more	0	0	0	0	11	590	4	130	9	210
Total	**113**	**3,700**	**52**	**170**	**326**	**5,400**	**126**	**750**	**210**	**1,650**

Grapes

Grape vineyards covered 12,300 acres at the end of 1991, a 300 acres expansion since 1991. The number of farms slipped slightly from 1991 to 549. That count, however, was one-third less than the growers in 1982. Eighty-eight percent of the land in vineyards is in Berrien and Van Buren Counties. Wine grape acreage in Leelanau and Grand Traverse Counties, however, continued to expand.

Acres of Concords remained at 9,600. Niagaras, however, increased by 200 acres to 1,750. Vinifera acres also continued their rise, reaching 310 acres, up from only 80 in 1982. There were 530 acres of French hybrids in 1994, down from 630 in 1982.

Table 1.-Grapes: Number of farms and acres by county and district, 1982-1994

County and district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Northwest	13	17	12	20	140	155	180	300
West Central	14	17	9	11	45	55	40	30
Allegan	13	11	8	9	120	90	60	70
Berrien	492	423	333	315	6,090	5,770	6,100	6,100
Cass	14	13	12	13	470	540	620	630
Kalamazoo	40	33	24	20	620	550	420	380
Van Buren	211	181	150	134	5,100	4,390	4,500	4,700
Southwest	770	661	527	491	12,400	11,340	11,700	11,880
East	25	26	27	27	95	50	100	90
Total	**822**	**721**	**575**	**549**	**12,680**	**11,600**	**12,020**	**12,300**

Table 2.-Grapes: Number of farms and acres by size group

Size group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-9 acres	403	279	254	1,680	1,270	1,100
10-29 acres	215	192	193	3,410	3,160	3,200
30-99 acres	86	86	78	3,960	4,380	4,000
100 acres or more	17	18	24	2,550	3,190	4,000
Total	**721**	**575**	**549**	**11,600**	**12,000**	**12,300**

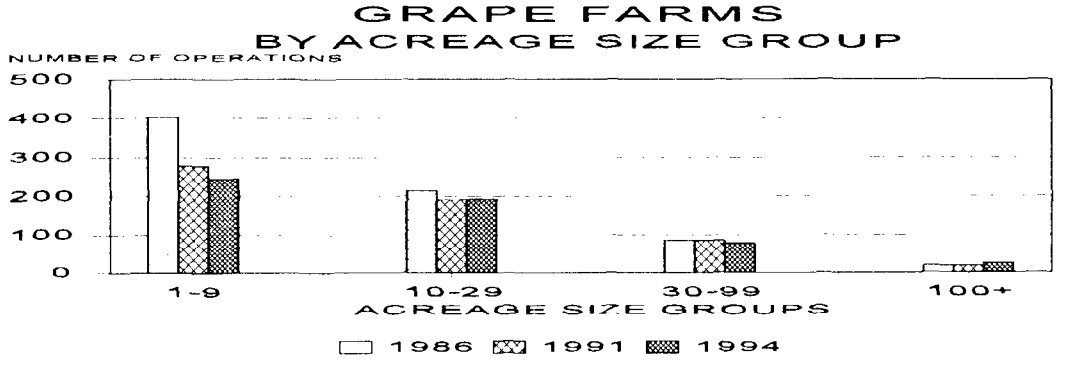


Table 3.-Grapes: Acres by variety and district

Variety	District			
	Northwest	East & West Central	Southwest	**Total**
Concord	3	22	9,575	**9,600**
Chardonnay	88	1	41	**130**
Foch	6	2	42	**50**
Niagara	3	37	1,710	**1,750**
Seyval	10	5	75	**90**
Vidal Blanc	0	2	128	**130**
Vignoles	26	26	58	**110**
White Riesling	64	0	26	**90**
Others	100	25	225	**350**
Total	**300**	**120**	**11,880**	**12,300**

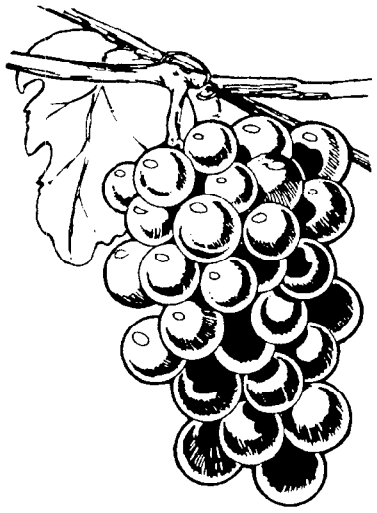


Table 4.-Grapes: Other varieties grown

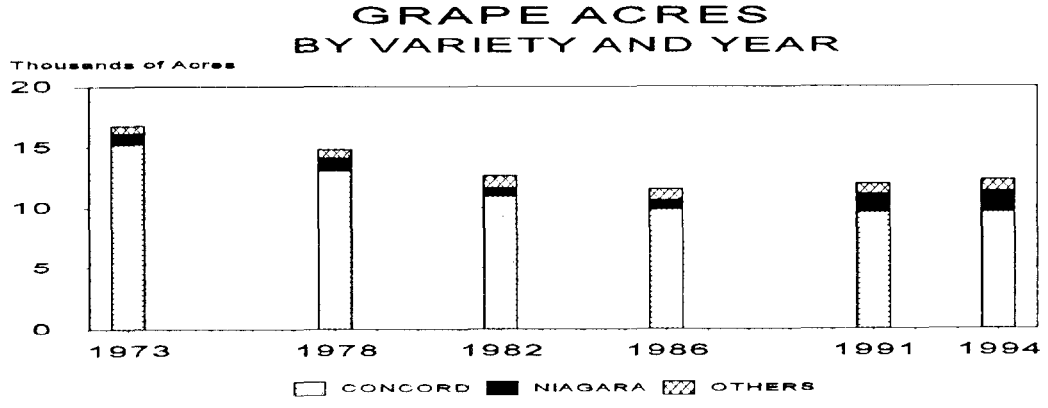
Variety	Acres
Aurore	30
Baco Noir	12
Cabernet Franc	9
Canadice	2
Cascade	3
Catawba	10
Cayuga White	13
Chambourcin	27
Chancellor	18
Chelois	11
De Chaunac	39
Delaware	21
Fredonia	23
Gamay	7
Gewurtztraminer	6
Himrod	6
Merlot	13
Pinot Gris	22
Pinot Meunier	2
Pinot Noir	26
Others	80
Total	**350**

Table 5.-Grapes: Acres by variety and trellis

Variety	Trellis					
	Geneva Double Curtain	4-Arm or Umbrella Kniffen	Single Wire Cordon	Pendlebogen	Other	**Total**
Concord	1,570	2,760	5,080	50	140	**9,600**
Chardonnay	2	39	15	44	30	**130**
Foch	5	1	38	0	6	**50**
Niagara	230	730	780	6	4	**1,750**
Seyval	1	35	35	1	18	**90**
Vidal Blanc	1	96	26	0	7	**130**
Vignoles	15	33	50	1	11	**110**
White Riesling	1	40	6	27	16	**90**
Others	35	86	130	51	48	**350**
Total	**1,860**	**3,820**	**6,160**	**180**	**280**	**12,300**

Table 6.-Grapes: Acres by variety and year planted

Year planted	Concord	Chardon-nay	Foch	Niagara	Seyval	Vidal Blanc	Vignoles	White Riesling	Others	**Total**
1964 and before	6,330	0	0	330	0	0	0	0	40	**6,700**
1965-1969	1,220	0	0	45	0	1	0	0	4	**1,270**
1970-1974	840	11	9	160	12	30	15	21	72	**1,170**
1975-1979	360	1	27	85	46	16	35	4	46	**620**
1980-1984	250	10	1	180	25	74	20	17	43	**620**
1985-1989	200	28	2	540	7	7	25	16	35	**860**
1990	100	14	1	130	0	0	5	1	19	**270**
1991	95	16	8	100	0	0	10	5	36	**270**
1992	120	25	0	60	0	0	0	11	24	**240**
1993	55	12	2	80	0	2	0	4	15	**170**
1994	30	13	0	40	0	0	0	11	16	**110**
Total	**9,600**	**130**	**50**	**1,750**	**90**	**130**	**110**	**90**	**350**	**12,300**



Nectarines

The acres of nectarines slipped 13 percent from 1991 to 230 acres in 1994. Almost 70 percent of the nectarines were in Berrien County. Fantasia, Red Gold and Sunglo, the top three varieties, accounted for nearly three-fourths of the nectarine trees.

Table 1.-Nectarines: Number of farms and acres by district, 1982-1994

District	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Northwest	12	14	11	11	16	10	9	9
West Central	14	22	24	21	17	40	52	33
Southwest	41	65	64	57	107	120	200	185
East	10	6	5	4	6	5	4	3
Total	**77**	**107**	**104**	**93**	**146**	**175**	**265**	**230**

Table 2.-Nectarines: Acres and farms by size group

Size Group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-4 acres	99	89	84	100	105	115
5-9 acres	5	9	6	30	55	35
10 or more acres	3	6	3	45	105	80
Total	**107**	**104**	**93**	**175**	**265**	**230**

Table 3.-Nectarines: Acres and trees by year of planting

Year	Acres	Trees
1980 & earlier	17	2,500
1981-1985	37	5,400
1986-1990	150	25,000
1991-1994	26	4,100
Total	**230**	**37,000**

Table 4.-Nectarines: Acres and trees by variety

Variety	Acres	Trees
Fantasia	85	13,700
Harko	7	1,000
Juneglo	6	700
Red Gold	55	9,100
Summer Beauty	5	800
Sunglo	26	4,400
Others	30	5,200
Unknown	16	2,100
Total	**230**	**37,000**

Peaches

Thousands of peach trees were killed by the frigid winter of 1993-94, causing a steep decline in Michigan peach area to 6,800 acres at the end of 1994. That was 18 percent lower than three years earlier. The number of growers fell by 14 percent. Berrien and Ocean Counties had 60 percent of peach acreage.

New planting brought the density to 137 trees per acre. Red Haven remained the most common variety, but more Baby Gold trees were planted over the past three years than any other peach. Arkansas Gold-9's and various strains of Flaming Fury have also been popular new plantings.

Table 1.-Peaches: Number of farms and acres by county and district, 1982-1994

County and district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Antrim[1]	21	29	18	15	75	90	75	41
Benzie	21	18	8	6	75	50	20	19
Grand Traverse	20	20	14	16	60	80	40	21
Leelanau	33	38	25	26	140	140	85	49
Manistee	30	24	21	20	140	160	190	170
Northwest	**125**	**129**	**86**	**83**	**490**	**520**	**410**	**300**
Ionia	(2)	16	13	9	(2)	110	60	10
Kent	57	70	47	31	560	600	400	220
Mason	29	27	20	17	350	320	300	250
Muskegon	13	10	10	8	150	170	250	160
Newaygo	12	15	10	9	290	270	280	190
Oceana	77	83	69	69	820	790	1,150	1,500
Ottawa	20	25	15	15	180	170	160	100
Others	17	6	8	6	120	30	30	20
West Central	**225**	**252**	**192**	**164**	**2,470**	**2,460**	**2,630**	**2,450**
Allegan	55	58	44	43	640	790	580	530
Berrien	282	269	206	188	3,370	3,640	3,350	2,620
Van Buren	64	74	62	49	870	900	920	580
Others	12	23	17	12	60	210	100	70
Southwest	**413**	**424**	**329**	**292**	**4,940**	**5,540**	**4,950**	**3,800**
East	**69**	**67**	**106**	**71**	**430**	**280**	**300**	**250**
Total	**832**	**872**	**713**	**610**	**8,330**	**8,800**	**8,290**	**6,800**

[1]Includes Charlevoix, Cheboygan, and Emmet.

[2]Included with others in 1982.

Table 2.-Peaches: Number of farms and acres by size group

Size group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-9 acres	597	472	420	2,060	1,530	1,300
10-29 acres	217	162	130	3,370	2,590	2,150
30-99 acres	46	75	54	2,250	3,590	2,550
100-199 acres	7	4	6	1,120	580	800
Total	**867**	**713**	**610**	**8,800**	**8,290**	**6,800**

Table 3.-Peaches: Acres by variety and year planted

Year planted	Arkan-sas-9	Baby-gold	Bellaire	Canadian Harmony	Crest-haven	Fayette	Flaming Fury	Garnet Beauty	Glo-haven	Jay-haven
1974 and before	0	35	0	1	1	4	0	24	20	0
1975	0	11	1	6	11	0	0	9	9	2
1976	0	1	0	14	2	0	0	4	3	0
1977	0	26	0	3	11	0	0	1	10	0
1978	0	3	0	22	6	0	0	9	4	9
1979	0	13	0	10	5	0	0	0	8	10
1980	0	9	2	30	7	0	0	11	14	1
1981	0	8	2	39	19	7	0	11	6	4
1982	0	58	1	39	28	5	0	8	14	24
1983	0	84	6	43	17	0	0	13	13	10
1984	0	13	1	32	27	4	0	8	35	4
1985	0	38	10	24	9	23	0	7	13	2
1986	0	37	9	58	10	4	0	7	3	10
1987	0	52	13	33	21	3	0	7	21	2
1988	0	78	11	42	42	10	0	2	8	2
1989	0	63	9	40	24	16	11	2	14	1
1990	0	97	14	40	19	13	21	6	21	3
1991	0	68	65	39	47	4	18	3	16	4
1992	0	58	10	26	6	7	43	5	2	2
1993	50	220	4	7	2	22	56	3	4	0
1994	40	78	12	2	6	18	31	0	2	0
Total	**90**	**1,050**	**170**	**550**	**320**	**140**	**180**	**140**	**240**	**90**

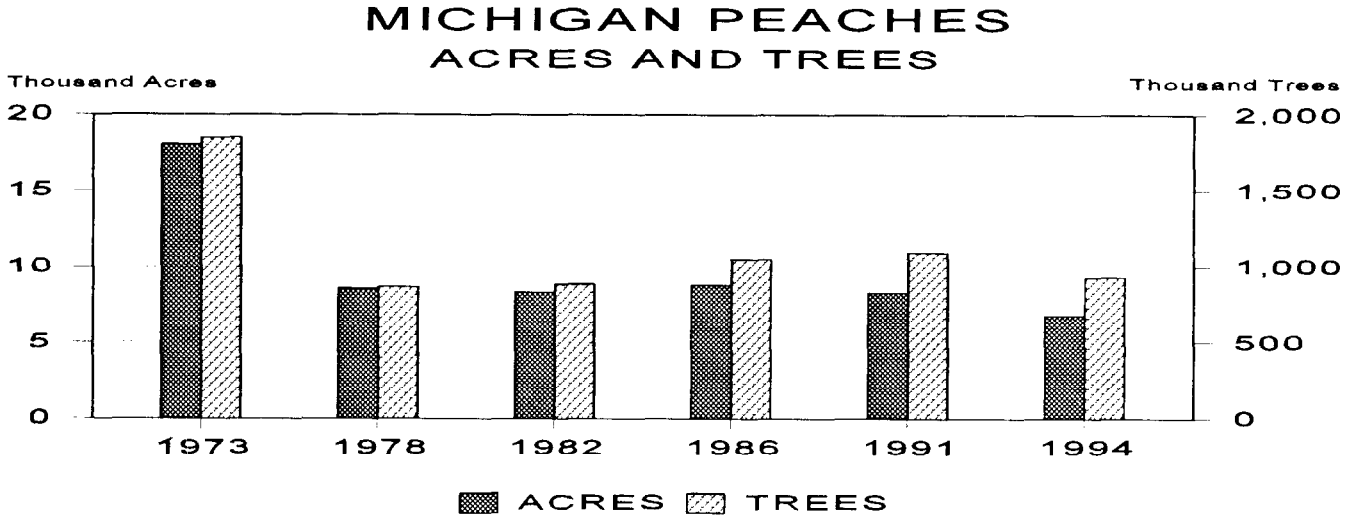


Table 3.-Peaches: Acres by variety and year planted (continued)

Year planted	Jim Dandee	Loring	New-haven	Red-haven	Red-kist	Red-skin	Sun-crest	Other	Un-known	Total
1974 and before	0	4	9	130	0	6	0	4	2	**240**
1975	0	1	1	62	0	15	0	1	1	**130**
1976	2	0	2	50	0	9	0	3	0	**90**
1977	0	1	0	39	2	4	7	2	14	**120**
1978	0	0	6	140	2	14	0	5	0	**220**
1979	1	3	2	71	9	6	8	4	0	**150**
1980	1	19	3	180	6	27	1	18	1	**330**
1981	10	3	9	180	0	23	3	2	4	**330**
1982	9	6	6	200	4	23	11	24	0	**460**
1983	1	30	30	130	4	32	3	29	15	**460**
1984	0	25	12	120	1	34	0	10	4	**330**
1985	6	14	18	110	3	29	4	25	5	**340**
1986	14	27	29	120	18	30	14	16	4	**410**
1987	1	26	23	86	4	34	7	25	2	**360**
1988	5	28	37	100	1	27	11	36	0	**440**
1989	3	36	26	120	3	27	9	44	2	**450**
1990	1	40	9	91	6	21	11	27	0	**440**
1991	21	3	19	120	3	11	1	36	12	**490**
1992	11	11	12	43	1	2	0	28	13	**280**
1993	5	2	3	66	1	4	0	21	0	**470**
1994	9	1	4	42	2	2	0	10	1	**260**
Total	**100**	**280**	**260**	**2,200**	**70**	**380**	**90**	**370**	**80**	**6,800**

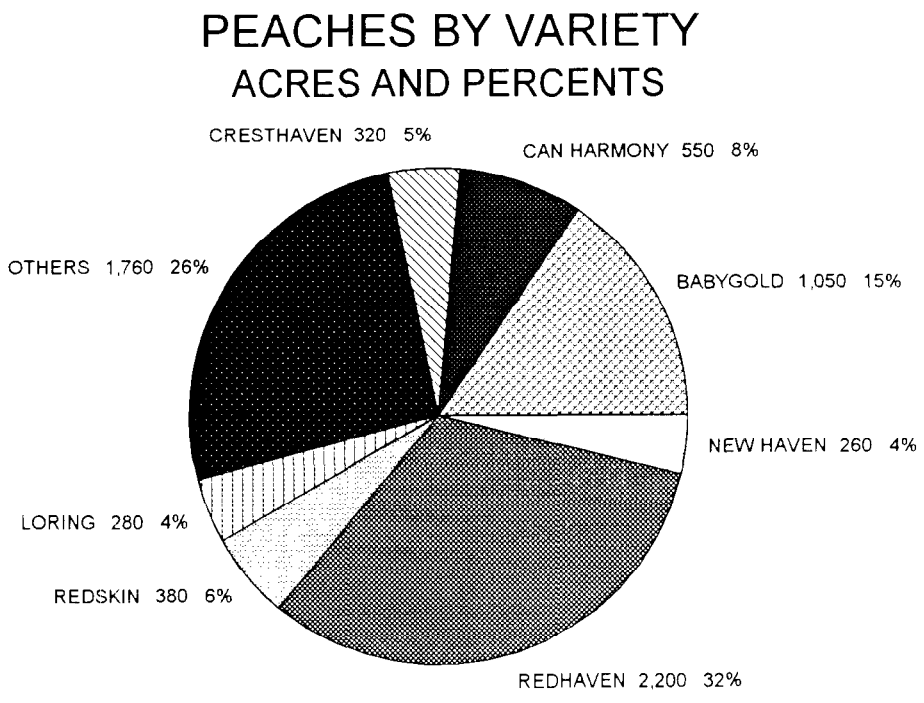


Table 4.-Peaches: Trees by variety and year planted

Year planted	Arkan-sas	Babygold	Bellaire	Canadian Harmony	Crest-haven	Fayette	Flaming Fury	Garnet Beauty	Glo-haven	Jay-haven
1974 or before	0	4,000	0	90	100	800	0	2,630	2,140	0
1975	0	1,260	110	820	1,060	0	0	920	980	170
1976	0	110	0	1,900	230	0	0	450	320	0
1977	0	2,950	0	440	1,390	0	0	120	1,160	0
1978	0	380	0	3,110	750	0	0	1,290	470	1,030
1979	0	1,700	0	1,580	650	0	0	0	1,000	1,180
1980	0	1,000	260	4,170	850	0	0	1,410	2,020	190
1981	0	950	220	4,790	2,420	940	0	1,770	750	520
1982	0	7,570	120	5,220	3,980	800	0	1,070	1,630	3,150
1983	0	9,970	870	5,380	2,410	0	0	1,650	1,350	1,410
1984	0	1,760	140	4,590	3,350	540	0	990	4,800	520
1985	0	5,170	1,420	3,080	1,280	3,220	0	1,220	1,950	290
1986	0	4,700	1,160	8,490	1,310	540	0	1,270	430	1,150
1987	0	6,700	1,690	4,480	2,680	430	0	920	2,530	310
1988	0	10,300	1,620	8,550	5,220	1,330	0	270	1,020	280
1989	0	7,270	1,230	5,600	2,980	2,010	2,700	270	2,030	140
1990	0	13,400	2,030	7,760	3,000	2,270	7,250	810	3,180	380
1991	0	9,800	9,150	5,100	6,120	530	3,900	420	2,130	450
1992	0	7,910	1,230	3,880	830	980	8,700	700	260	230
1993	6,500	27,700	520	1,090	340	4,190	12,800	420	540	0
1994	6,000	10,400	1,530	380	1,150	2,320	6,650	0	410	0
Total	**12,500**	**135,000**	**23,300**	**80,500**	**42,100**	**20,900**	**42,000**	**18,600**	**31,100**	**11,400**

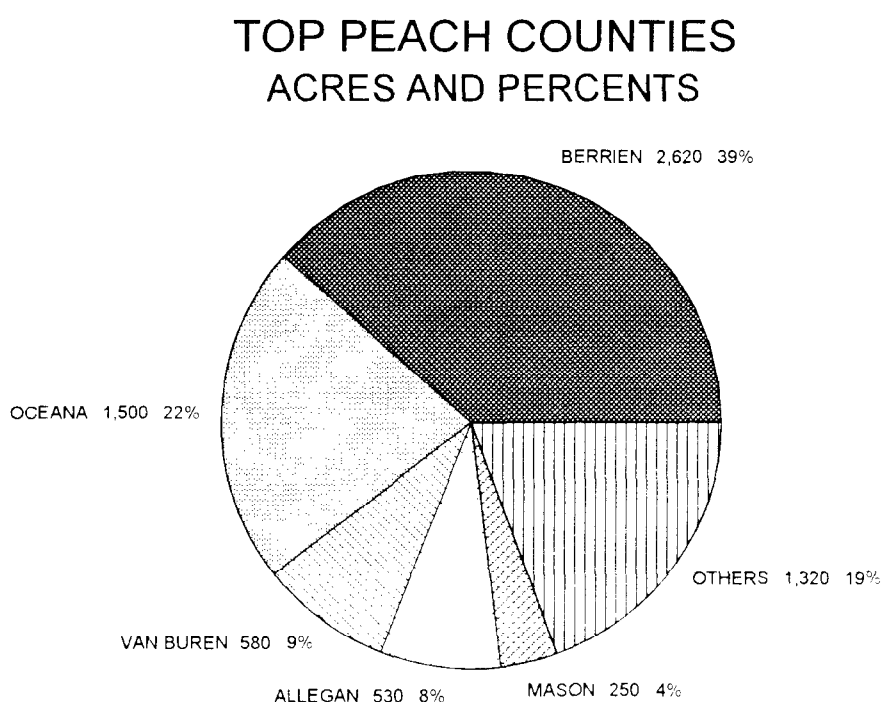


Table 4.-Peaches: Trees by variety and year planted (continued)

Year planted	Jim Dandee	Loring	New-haven	Red-haven	Red-kist	Red-skin	Sun-crest	Other	Un-known	Total
1974 and before	0	570	850	14,100	0	690	0	470	160	**26,600**
1975	0	190	110	7,370	0	1,880	0	120	110	**15,100**
1976	220	0	320	6,140	0	1,090	0	420	0	**11,200**
1977	0	160	0	4,710	260	470	1,020	240	1,680	**14,600**
1978	0	0	800	17,100	240	1,680	0	550	0	**27,400**
1979	130	330	240	9,000	1,220	790	1,090	490	0	**19,400**
1980	120	2,180	310	24,400	770	3,710	140	2,440	130	**44,100**
1981	1,550	490	1,180	23,700	0	3,400	500	250	470	**43,900**
1982	1,250	840	830	27,300	550	3,510	1,840	3,140	0	**62,800**
1983	220	3,620	4,390	17,400	530	4,570	450	3,650	1,830	**59,700**
1984	0	3,280	1,310	15,200	120	4,930	0	1,400	470	**43,400**
1985	870	1,690	2,240	14,700	400	4,180	570	3,710	510	**46,500**
1986	2,000	3,260	3,750	14,700	2,150	3,910	2,050	2,010	420	**53,300**
1987	160	3,190	2,930	11,400	510	4,280	1,040	3,370	280	**46,900**
1988	740	3,480	5,010	12,600	110	3,680	1,620	5,270	0	**61,100**
1989	560	4,940	3,970	16,700	410	3,670	1,360	6,310	250	**62,400**
1990	140	7,400	1,400	11,500	800	2,690	2,000	3,990	0	**70,000**
1991	3,930	440	2,470	17,500	420	1,420	220	5,020	1,580	**70,600**
1992	2,130	1,730	1,730	5,800	120	320	0	4,490	1,560	**42,600**
1993	930	270	440	8,930	120	560	0	3,750	0	**69,100**
1994	1,950	140	520	5,750	270	270	0	1,410	150	**39,300**
Total	**16,900**	**38,200**	**34,800**	**286,000**	**9,000**	**51,700**	**13,900**	**52,500**	**9,600**	**930,000**

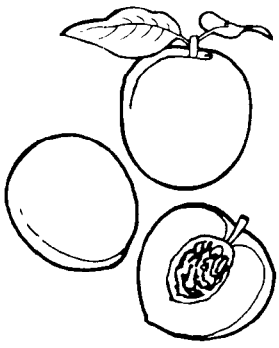


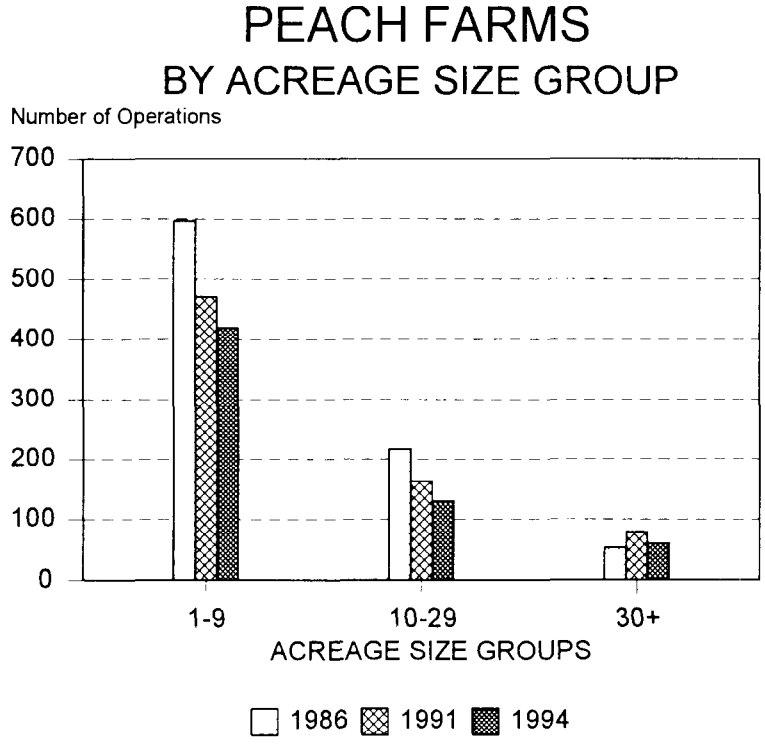
Table 5.-Peaches: Other varieties grown

Variety	Acres	Trees
Alberta	10	1,550
Biscoe	4	600
Candor	10	1,300
Encore	19	2,700
Harbelle	13	1,750
Harbinger	8	950
Harbrite	35	4,700
Harcrest	11	1,750
Harrow Beauty	3	500
Harrow Diamond	6	1,400
Jersey Dawn	21	2,700
Jersey Glo	4	500
Reliance	5	500
Sweet Haven	40	6,000
Sweet Sue	31	3,600
Others	150	22,000
Total	**370**	**52,500**

Table 6.-Peaches: Acres and trees by variety and district

Variety	Northwest		West Central		Southwest		East		Total	
	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees
Arkansas-9	0	0	90	12,500	0	0	0	0	90	12,500
Baby Gold	5	600	940	120,000	105	14,400	0	0	1,050	135,000
Bellaire	5	600	70	9,900	89	12,000	6	800	170	23,300
Canadian Harmony	16	2,050	250	42,000	270	34,600	14	1,850	550	80,500
Crest Haven	6	770	95	13,800	210	26,500	9	1,030	320	42,100
Fayette	0	0	5	770	130	19,500	5	630	140	20,900
Flaming Fury[1]	0	0	7	1,050	170	40,500	3	450	180	42,000
Garnet Beauty	13	1,600	26	3,400	90	11,600	11	2,000	140	18,600
Glohaven	16	2,000	37	4,800	160	21,000	27	3,300	240	31,100
Jayhaven	8	1,050	13	1,600	68	8,600	1	150	90	11,400
Jim Dandee	1	100	10	2,300	81	13,300	8	1,200	100	16,900
Loring	6	900	12	2,020	260	35,100	2	180	280	38,200
New Haven	7	900	57	7,900	190	25,000	6	1,000	260	34,800
Red Haven	180	20,200	720	96,000	1,200	158,000	100	11,800	2,200	286,000
Redkist	1	130	1	160	58	7,500	10	1,210	70	9,000
Redskin	18	1,900	11	1,300	340	47,300	11	1,200	380	51,700
Suncrest	0	0	21	3,000	67	10,700	2	200	90	13,900
Other	13	1,700	65	8,300	270	39,000	22	3,500	370	52,500
Unknown	5	500	20	2,200	42	5,400	13	1,500	80	9,600
Total	**300**	**35,000**	**2,450**	**333,000**	**3,800**	**530,000**	**250**	**32,000**	**6,800**	**930,000**

[1]Includes all numbers of Flaming Fury (PF).



Pears

Land in pears slid to 1,100 acres. Since 1982 the number of pear growers and acres have both fallen by 44 percent. Bartletts and Boscs accounted for 93 percent of the pear acres. Oceana supplanted Allegan as the top pear county. Oceana, Allegan and Berrien had over half the acreage.

Table 1.-Pears: Number of farms and acres by county and district, 1982-1994

County and district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Antrim[1]		8	7	7		40	34	30
Benzie	10	9	6	4	40	40	16	16
Grand Traverse	22	15	13	7	130	100	84	55
Leelanau	16	16	11	9	48	40	38	34
Others	19	8	8	9	52	20	18	25
Northwest	**67**	**56**	**45**	**36**	**270**	**240**	**190**	**160**
Kent	25	26	18	8	88	60	36	23
Mason	14	15	11	10	100	100	64	69
Oceana	37	31	21	19	310	270	210	250
Ottawa	11	10	3	4	42	40	9	11
Others	16	15	15	11	50	60	51	47
West Central	**103**	**97**	**68**	**52**	**590**	**530**	**370**	**400**
Allegan	48	38	31	25	340	290	230	170
Berrien	81	79	61	42	294	270	180	150
Van Buren	34	33	27	21	248	200	180	115
Others	3	5	8	3	8	20	10	5
Southwest	**166**	**155**	**127**	**91**	**890**	**780**	**600**	**440**
East	**83**	**89**	**75**	**54**	**200**	**150**	**140**	**100**
Total	**419**	**397**	**315**	**233**	**1,950**	**1,700**	**1,300**	**1,100**

[1]Includes Charlevoix, Cheboygan, and Emmet.

Table 2.-Pears: Number of farms and acres by size group

Size group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-4 acres	290	236	164	490	360	280
5-9 acres	59	43	37	360	260	230
10-19 acres	37	24	23	490	290	290
20 or more acres	11	12	9	360	390	300
Total	**397**	**315**	**233**	**1,700**	**1,300**	**1,100**

Table 3.-Pears: Varieties by district

Variety	Northwest		West Central		Southwest		East		**Total**	
	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	**Acres**	**Trees**
Bartlett	140	13,900	350	42,200	340	34,200	70	6,200	**900**	**96,500**
Bosc	13	1,300	26	2,400	61	6,500	20	2,300	**120**	**12,500**
Others	7	800	24	3,100	39	4,200	10	900	**80**	**9,000**
Total	**160**	**16,000**	**400**	**47,700**	**440**	**44,900**	**100**	**9,400**	**1,100**	**118,000**

Table 4.-Pears: Trees by variety and year planted

Year	Bartlett	Bosc	Others	Total
1969 and before	72,300	6,800	3,400	**82,500**
1970-1979	7,000	1,350	450	**8,800**
1980-1989	8,700	3,250	3,350	**15,300**
1990	450	250	400	**1,100**
1991	350	120	230	**700**
1992	2,200	130	170	**2,500**
1993	3,100	150	250	**3,500**
1994	2,400	450	750	**3,600**
Total	**96,500**	**12,500**	**9,000**	**118,000**

Table 5.-Pears: Acres by variety and year of planting

Year	Bartlett	Bosc	Others	Total
1969 and before	690	73	37	**800**
1970-1979	64	12	4	**80**
1980-1989	77	27	26	**130**
1990	4	2	2	**8**
1991	3	1	2	**6**
1992	18	1	1	**20**
1993	25	1	2	**28**
1994	19	3	6	**28**
Total	**900**	**120**	**80**	**1,100**

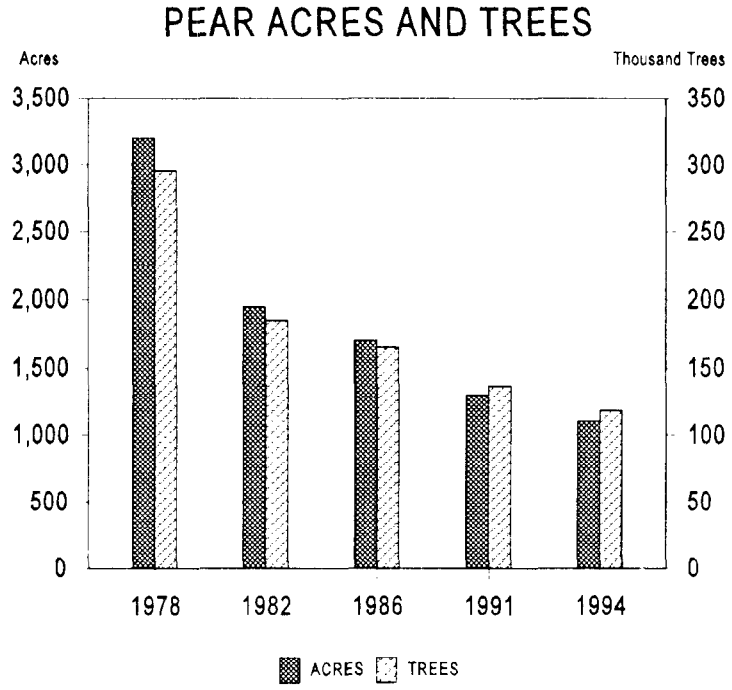


Table 6.-Pears: Other varieties grown

Variety	Acres	Trees
Asians	13	2,400
Clapp's	40	4,000
D'Anjou	6	750
Kieffer	5	400
Spartlett	6	650
Others	10	800
Total	**80**	**9,000**

Plums

Plum acres dropped to 1,900, 50 percent of the level in 1982. Commercial fruit operations growing plums in 1994 numbered 325, down 22 percent from three years earlier. The top four counties, Oceana, Van Buren, Leelanau and Berrien, contained 60 percent of the plum acres. Stanleys and Damsons accounted for 91 percent of the trees.

Table 1.-Plums: Number of farms and acres by county and district, 1982-1994

County and district	Farms				Acres			
	1982	1986	1991	1994	1982	1986	1991	1994
Antrim[1]	12	14	9	7	75	95	33	7
Benzie	14	14	5	2	105	140	32	23
Grand Traverse	49	44	27	18	380	360	250	160
Leelanau	56	59	36	31	530	600	330	280
Manistee	12	10	10	9	35	40	70	30
Northwest	**143**	**141**	**87**	**67**	**1,125**	**1,235**	**715**	**500**
Kent	27	31	20	16	150	260	140	85
Mason	20	21	18	17	190	230	210	180
Newaygo	7	8	4	1	55	70	45	30
Oceana	63	50	38	31	715	610	450	370
Ottawa	13	10	10	7	90	70	70	25
Others	6	12	8	7	60	45	25	10
West Central	**136**	**132**	**98**	**79**	**1,260**	**1,285**	**940**	**700**
Allegan	28	23	13	16	160	130	110	95
Berrien	108	111	88	73	380	400	310	220
Van Buren	50	54	42	42	740	610	400	300
Others	13	17	11	9	45	160	75	50
Southwest	**199**	**205**	**154**	**140**	**1,325**	**1,300**	**895**	**665**
East	**64**	**62**	**78**	**39**	**90**	**80**	**50**	**35**
Total	**542**	**540**	**417**	**325**	**3,800**	**3,900**	**2,600**	**1,900**

[1]Includes Charlevoix, Cheboygon and Emmet.

Table 2.-Plums: Number of farms and acres by size group

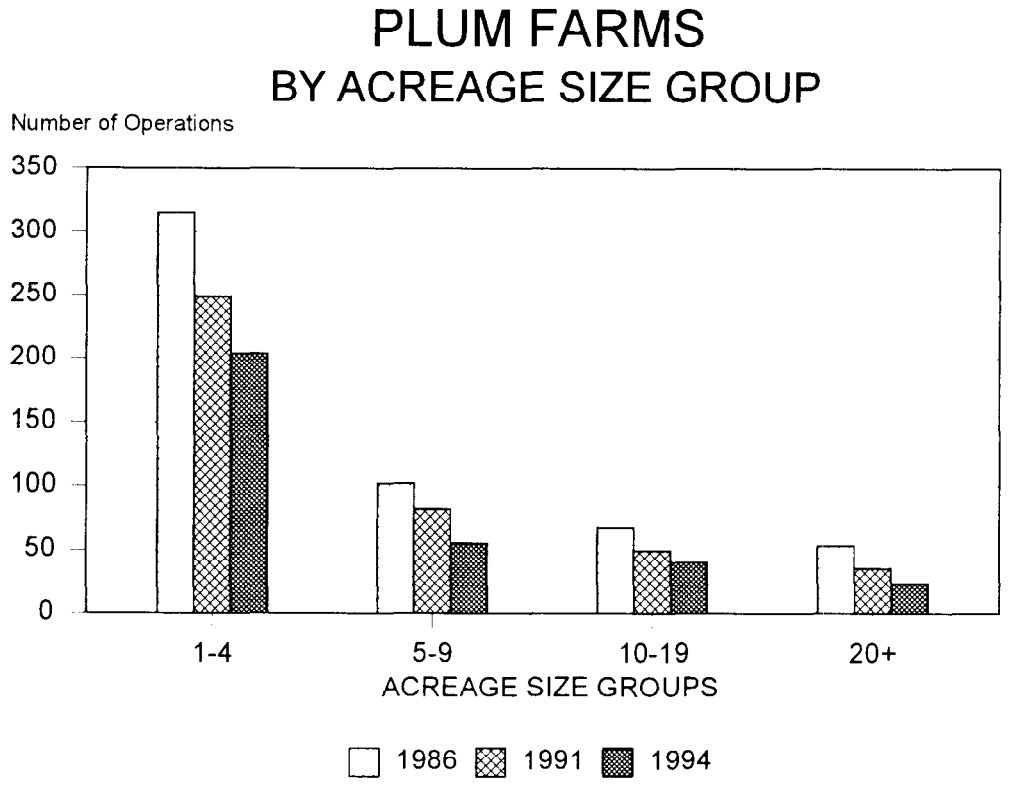
Size group	Farms			Acres		
	1986	1991	1994	1986	1991	1994
1-4 acres	316	249	204	530	400	340
5-9 acres	102	82	56	670	500	350
10-19 acres	68	50	41	840	670	510
20 acres or more	54	36	24	1,860	1,030	700
Total	**540**	**417**	**325**	**3,900**	**2,600**	**1,900**

Table 3.-Plums: Acres by variety and year planted

Year	Damson	Stanley	Others	Total
1974 & earlier	38	180	12	**230**
1975-1979	40	260	20	**320**
1980-1984	10	590	40	**640**
1985-1989	24	420	56	**500**
1990	3	13	2	**18**
1991	2	41	3	**46**
1992	8	13	2	**23**
1993	10	52	8	**70**
1994	15	31	7	**53**
Total	**150**	**1,600**	**150**	**1,900**

Table 4.-Plums: Trees by variety and year planted

Year	Damson	Stanley	Others	Total
1974 & earlier	3,800	18,000	1,200	**23,000**
1975-1979	4,600	26,700	2,200	**33,500**
1980-1984	1,150	69,000	4,850	**75,000**
1985-1989	2,700	51,500	7,700	**61,900**
1990	350	1,600	250	**2,200**
1991	250	5,000	350	**5,600**
1992	1,000	1,500	300	**2,800**
1993	1,250	6,200	1,150	**8,600**
1994	1,900	7,500	1,000	**10,400**
Total	**17,000**	**187,000**	**19,000**	**223,000**



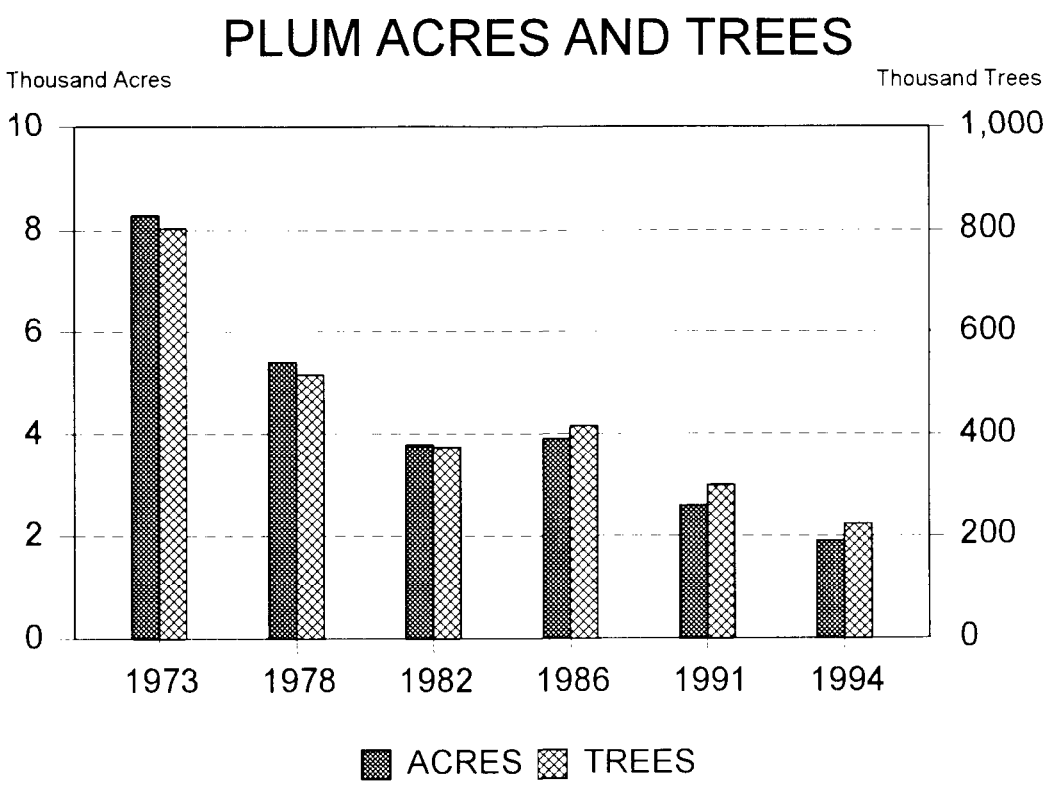
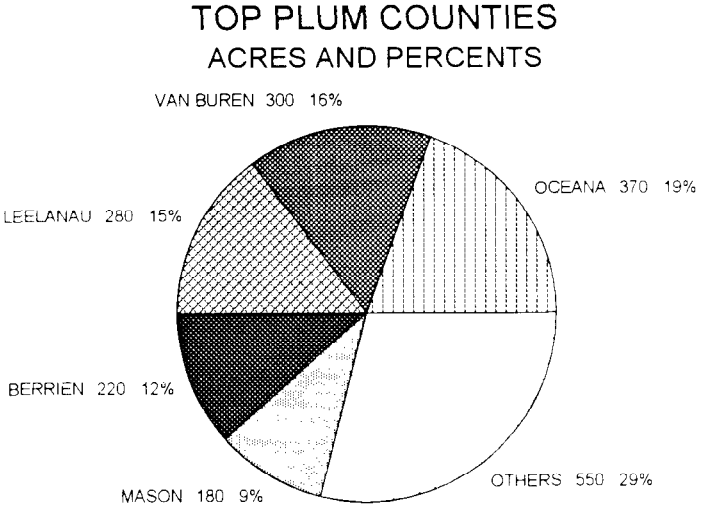


Table 5.-Plums: Varieties by district

Variety	Northwest		West Central		Southwest		East		Total	
	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	**Acres**	**Trees**
Damson	100	11,000	30	3,500	15	1,700	5	800	**150**	**17,000**
Stanley	370	41,500	650	72,000	565	72,000	15	1,500	**1,600**	**187,000**
Others	30	3,500	20	2,500	85	11,300	15	1,700	**150**	**19,000**
Total	**500**	**56,000**	**700**	**78,000**	**665**	**85,000**	**35**	**4,000**	**1,900**	**223,000**

Table 6.-Plums: Other varieties grown

Variety	Acres	Trees
Blufre	40	4,400
Dunkelburg	3	370
Empress	3	300
Italian	6	650
Methley	5	600
Ozark Premier	11	1,130
Santa Rosa	11	3,500
Shiro	10	1,050
Valor	23	2,700
Others	38	4,300
Total	**150**	**19,000**



Survey Methods

The list sampling frame maintained by the Michigan Agricultural Statistics Service was the primary source of names of commercial fruit farms. Commercial meant any operation with at least one acre of any of the eleven fruits on the inventory. (The exception was brambles, for which one-tenth acre sufficed.) Data for all fruit was collected for every qualifying operation.

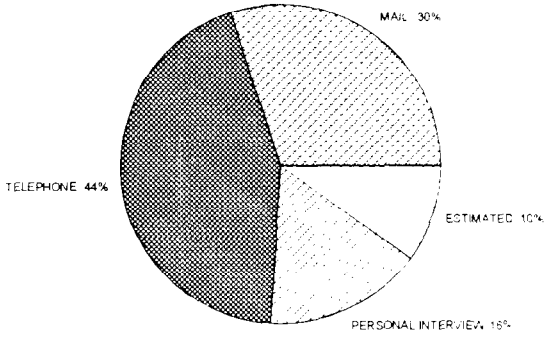
Questionnaires and cover letters were mailed to fruit farms on the list frame October 24, 1994. Large farms were sent only a cover letter informing operators that a NASDA data collector would contact them to collect the requested data. Growers who responded to the 1991 Fruit Survey were given a printout of their responses to that inventory. Data collection continued until the spring of 1995.

The apple section of the survey instrument is shown at the end of this section. Farmers were asked to complete, by block (vineyard or plantation), the block name or number, the county, township and section where that block was located, variety, rootstock or trellis, 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 90 percent of the farms. There were 30 percent returned by mail, 44 percent completed by telephone and 16 percent done by personal interview. Nine percent refused to do the inventory and one percent were unable to be contacted. Estimates of total acres of each fruit were made from various sources for the farms for which detailed block records were not available.

The completion rates of the detailed data varied by region 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 accompanying table. Inverses of those completion rates were used to expand detailed data to total acreage totals by fruit and district. The higher the completion rate for a district and fruit, the more accurate are the detailed data shown in the two-way and three-way tables of this bulletin.

DATA COLLECTION METHODS
PERCENTS



Percent of Acreage Completed by District and Fruit

District	Apples	Apricots	Blueberries	Brambles	Cherries, sweet	Cherries, tart	Grapes	Nectarines	Peaches	Pears	Plums	Total
Northwest	85.0	67.3	98.4	97.0	94.7	93.3	100.0	85.7	72.8	96.9	90.1	87.5
Oceana-Mason	71.4											70.2
Grand Rapids	89.6											90.7
West Central		53.5	92.7	82.9	82.9	84.5	98.1	91.9	67.1	91.8	70.1	
Southwest	87.1	98.1	94.2	68.8	94.9	97.1	93.3	79.9	88.6	89.8	94.3	89.3
North	79.1											84.1
Saginaw Bay	74.6											89.0
Central	73.8											76.2
West Thumb	84.4											83.6
East Thumb	72.6											73.8
South Central	67.0											69.8
Southeast	92.1											91.1
East		100.0	91.0	82.8	88.8	88.1	98.0	100.0	81.7	68.0	80.0	
State	85.6	75.0	93.6	78.2	93.1	91.0	93.5	82.6	79.9	89.1	84.1	86.1

Michigan
Agricultural
Statistics
Service

P.O. Box 20008
Lansing, Michigan 48901-0608
(517) 377-1834

Fruit Survey-1994

Michigan Rotational Survey
Fruit
Vegetables
Nursery and Christmas Trees

October 21, 1994

Dear Grower:

Michigan's fruit industry needs updated information for planning, marketing, and production forecasting. The last survey was conducted in 1991. 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 1994 is needed. A computer printout of your report will be returned to you for your records. Your report is strictly confidential. Thank you for your help.

Don J. Fedewa
State Statistician

Marty Saffell
Statistician

To avoid duplication, indicate below any farm name or partner(s) associated with this operation ***not*** included in the above address.

Farm Name: _____

Partner's Name(s): _____

Address: _____

City: _____ Zip: _____

County of Operation: _____

If not growing fruit,
check reason below and give new operator's name.

1. ☐ Farm sold.
2. ☐ Retired from farming.
3. ☐ Entire farm rented to others.
4. ☐ Farming, but not growing fruit.

New Operator Name: _____

Address: _____

City: _____ Zip: _____

Phone: _____

***** **Please read instructions on back page before proceeding.** *****

Report for all land you operate (Include land you rent from others, but exclude land you rent to others).

List the total acres in your operation, for each fruit grown.

Crop	Total Acreage
Apples	001
Tart Cherries	101
Sweet Cherries	151
Blueberries	201
Grapes	301
Peaches	401

Crop	Total Acreage
Plums	501
Pears	601
Brambles	701
Apricots	801
Nectarines	851
All Fruit	901

Apples

VARIETY	CODE	VARIETY	CODE	VARIETY	CODE	VARIETY	CODE	VARIETY	CODE
Cortland	011	Fuji	016	Jonagold	020	Mutsu	025	Spartan	031
Delicious, Golden	012	Gala	017	Jonamac	046	Northern Spy	026	Winesap	032
Delicious, Regular*	013	Granny Smith	018	Jonathan	022	Paulared	027	Other (specify)	
Delicious, Sport Red**	014	Idared	019	Jonathan, Sport	023	Rome	029		
Empire	015	Jerseymac	021	McIntosh	024	Rome, Sport	030		

*Regular Delicious (Code 013) includes all strains developed before Starkrimson.
**Sport (Code 014) includes Starkrimson and all strains developed afterwards.

Common Rootstocks and Codes

ROOTSTOCK	CODE	ROOTSTOCK	CODE	ROOTSTOCK	CODE
Seedling	1	7 (VII)	4	9 (IX) & 9 clones	7
111	2	26	5	27	8
106	3	Mark	6	Interstem	9
Other (specify)					

Block (Name or number)	County (Name)	Township (Name)	Section (Number)	Variety (Code or name)	Rootstock code	Year planted	Trees (Number)	Acres	Spacing
Home Farm	Van Buren	Keeler	7	022	1	1968	525	5.0	20 x 20
Jones Place	Van Buren	Keeler	8	Sport Red Delicious	5	1982	530	4.0	16 x 20
Jones Place	Van Buren	Keeler	8	012	5	1982	125	1.0	16 x 20
								.	x
								.	x
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								.	x
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								.	x

Apples

Block (Name or number)	County (Name)	Township (Name)	Section (Number)	Variety (Code or name)	Rootstock code	Year planted	Trees (number)	Acres	Spacing
								.	x
								.	x
								.	x
								.	x
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								.	x

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 1991 Fruit Survey, you may find enclosed a printout of the blocks you reported in 1991. Space has been left on these printouts for you to update the information. Check all "other" varieties on the block record and update them. Your updated copy of the 1991 printout should be returned with this questionnaire in which you should report on new blocks acquired or planted since 1991. 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 1991 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 rootstock 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 the extra page provided in 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) 377-1834.

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

NAME	ADDRESS	PHONE

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	999 Status Code
Enumerator: _____	1 = Int 2 = Tel 3 = Mail 4 = Ref 5 = Inac