

SOUTH CAROLINA FRUIT TREE SURVEY

1996

prepared by

SOUTH CAROLINA AGRICULTURAL STATISTICS SERVICE

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FOREWORD

South Carolina's fruit growers received disastrous treatment from Mother Nature in 1996. Peach production in 1996 was the lowest since 1955 and utilized apple production was the lowest since 1986. In spite of this economically devastating year, the fruit industry in South Carolina is still a vital part of the State's agricultural economy.

This survey was a cooperative effort among the South Carolina Agriculture and Forestry Research System and the Department of Agriculture and Applied Economics of Clemson University and the South Carolina Agricultural Statistics Service. Results from this survey provide another benchmark for growers, Extension specialists, and researchers.

We sincerely appreciate the tremendous cooperation received from peach, apple, and grape growers throughout South Carolina. We also thank the fruit specialists with the Clemson Extension Service for their assistance in designing the survey form and in assisting with the successful completion of this survey.

Sincerely,

Robert A. Graham
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1996 SOUTH CAROLINA FRUIT TREE SURVEY

SUMMARY

South Carolina's commercial apple and peach orchards and grape vineyards totaled 20,255 acres as of December 1, 1996. This was 43 percent below the comparable acreage reported in 1991. Peach acreage decreased 46 percent, apples 15 percent and grapes 7 percent. Peach acreage was by far the largest, accounting for 84 percent of the total fruit acreage. Peach acreage registered a 37 percent decline in the Upper State while the Ridge and Coastal Plains were both down 50 and 51 percent respectively from 1991.

Although South Carolina's apple acreage was down 15 percent from 1991, the total number of trees only registered a 4 percent decrease. This is due to the increased popularity of higher density plantings in recent years. Growers in Spartanburg County reported a 4 percent increase in tree numbers, but Oconee County was off 12 percent and all other counties showed a 2 percent decline. South Carolina accounts for less than one percent of the Nation's apple production; however, the State is recognized for early, fine quality fruit.

Overall, grape acreage continued the downward trend that began in the mid-seventies. All Muscadine types were down 11 percent but Bunch types showed some resurgence and were up 19 percent. The decline of the grape industry is further highlighted when looking at the age of the vines, where 75 percent of the vines are 9 years old or older.

SURVEY METHOD

The 1996 South Carolina Fruit Tree Survey was conducted in the winter of 1996 and spring 1997. All data obtained were for the 1996 crop year.

Data collection for this survey consisted of one selected grower mailing as well as telephone and field enumeration. Grower names used were those maintained by the South Carolina Agricultural Statistics Service. Additional verification of growers was provided by Clemson University Extension Service personnel.

This survey covered all known commercial operations in South Carolina producing peaches, apples, and grapes. Growers were also asked to report acreage of other minor fruit crops, such as nectarines and plums. A commercial grower was defined as an operation having 100 or more peach or apple trees or one-tenth of an acre of grapevines. Operations with acreage in more than one county were counted only once, but the acreage was divided among counties as reported.

In addition to acreage and tree numbers, information was also collected on intentions to plant and/or remove trees or vines after the 1996 harvest. Any incomplete reports (from growers who preferred not to give the requested information) were estimated.

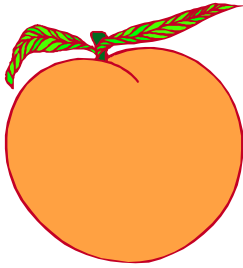
PEACHES: Number of Commercial Growers and Trees, South Carolina, Selected Years, 1950-1996

Years	Number of Growers	Trees of All Ages
1950	1,410	4,375,000
1958	1,305	4,927,000
1964	899	3,888,393
1965	885	3,730,913
1968	471	2,538,230
1972	367	2,277,507
1975	346	2,640,397
1978	299	3,140,185
1982	341	4,002,713
1985	272	4,007,659
1988	242	3,192,978
1991	218	3,185,159
1996	153	1,920,000

APPLES: Number of Commercial Growers and Trees, South Carolina, Selected Years, 1966-1996

Years	Number of Growers	Trees of All Ages
1966	82	177,433
1968	105	213,092
1972	122	264,160
1975	113	288,024
1978	114	323,951
1982	124	380,161
1985	105	651,831
1988	95	648,895
1991	82	688,868
1996	56	660,000

PEACHES



South Carolina had a total of 1,920,000 peach trees of all ages in 1996, 40 percent below the 1991 State total. All three peach growing regions showed large declines in tree numbers since 1991, with the Coastal Plains, the Ridge and the Upper State losing 48 percent, 42 percent, and 30 percent respectively. Edgefield County, located in the Ridge, remained the leading county in the State with 23 percent of the State's total trees. Spartanburg (Upper State) and Saluda (Ridge) had the second and third most trees at 22 percent and 19 percent respectively. Redglobe continued to be the leading variety, accounting for 10.5 percent of the total trees. Cresthaven, with 5.5 percent of total trees and Harvester, with 5.4 percent were the next most favored varieties. Trees between the ages of 4-13 years accounted for over 69 percent of all trees in the State.

Number of Commercial Peach Growers and Trees, by Counties and Regions, South Carolina, 1991 and 1996

Region and County	1991		1996	
	Number of Growers ^{1/}	Trees of All Ages	Number of Growers ^{1/}	Trees of All Ages
Upper State:				
Cherokee	6	121,341	4	40,700
Greenville	8	77,641	8	59,300
Spartanburg	87	609,774	55	434,100
York	10	42,435	10	41,400
Other ^{2/}	22	106,309	14	96,500
Region Total	133	957,500	91	672,000
Ridge:				
Aiken	3	243,689	3	94,800
Edgefield	27	995,902	13	450,000
Lexington	10	87,065	10	35,200
Saluda	16	323,863	13	370,000
Region Total	56	1,650,519	39	950,000
Coastal Plains:				
Allendale, Barnwell and Hampton	3	399,093	2	229,600
Orangeburg	12	99,407	9	49,400
Other ^{3/}	14	78,640	12	19,000
Region Total	29	577,140	23	298,000
STATE	218	3,185,159	153	1,920,000

^{1/} Growers with acreage in more than one county are counted only in the county of residence; trees are divided among counties. ^{2/} 1991 includes growers in Abbeville, Anderson, Lancaster, Laurens, Oconee, and Pickens counties; 1996 includes Abbeville, Anderson, Chester, Chesterfield, Kershaw, Lancaster, Laurens, Oconee, and Pickens counties. ^{3/} 1991 includes growers in Bamberg, Calhoun, Charleston, Clarendon, Colleton, Florence, Horry, Marlboro, and Sumter counties; 1996 includes Bamberg, Calhoun, Clarendon, Colleton, Darlington, Florence, Horry, Marlboro and Richland counties.

PEACHES

REGIONS OF COMMERCIAL PRODUCTION

Geographically, South Carolina's peach industry is divided into three general regions; the Upper State, the Ridge and the Coastal Plains. The location of each region is noted on the map below.

The Ridge continued to be the region with the largest number of peach trees in 1996. Edgefield County had the largest number of trees in that region and in the State. Approximately 50 percent of all trees were located in the Ridge with 47 percent of the region's trees in Edgefield County.

The Upper State region accounted for 35 percent of the trees in South Carolina. Spartanburg County ranked second in the State and accounted for 65 percent of the trees in the region.

In the Coastal Plains region, which had 16 percent of the State's trees, 94 percent of the trees were in Allendale, Barnwell, Hampton, and Orangeburg Counties.

For the State, the top five counties with the most trees ranked in descending order, are: 1 - Edgefield; 2 - Spartanburg; 3 - Saluda; 4 - Allendale; 5 - Aiken.

PEACHES

ACREAGE SET AND REMOVED, IRRIGATED AND AVERAGE TREES PER ACRE

Following the disastrous production year of 1996, many growers were uncertain as to the future of their operations. Many responded to the questions of their intentions to set and remove trees in 1997 with a "don't know". For the growers who did respond, their intentions were to remove about 19,400 trees and set about 32,300 trees statewide.

Acreage of peaches maintained for production in 1996 was 17,000 - down 46 percent from 1991. Average number of trees per acre in 1996 was 113 trees compared to 100 trees in 1991. This increase was attributed to many acres of "high density" plantings over the last few years. Acreage reported to be equipped for irrigation in 1996 totaled 13,800, about 81 percent of the total acreage in the State.

Total Acreage, Total Trees, Trees Per Acre and Acreage Equipped for Irrigation, by Region, South Carolina, 1996

Region	Acreage Maintained for Production	Total Trees	Trees per Acre	Acreage Equipped for Irrigation
Upper State	6,100	692,000	110	4,400
Ridge	8,300	950,000	114	7,600
Coastal Plains	2,600	298,000	115	1,800
STATE	17,000	1,920,000	113	13,800

HIGH DENSITY PEACH PLANTINGS

In recent years, there has been a growing interest in high density peach plantings and many of our larger growers are trying this new procedure. Although we did not specifically ask for high density plantings on the questionnaire, we did an impromptu survey of high density acreage and tree numbers when interviewing the larger growers. While this supplemental survey was only based on a sample of all growers, the results were quite interesting. The growers who responded to the question reported over 400 acres of high density plantings, with over 161,000 trees of various varieties. About 75 percent of the acreage was in the Ridge with the remainder in the Upper State.

PEACHES

NUMBER AND SIZE OF PEACH ORCHARD OPERATIONS

The number of commercial peach orchard operations in South Carolina in 1996 totaled 153, down 30 percent from the count in 1991. While the number of orchards has generally been declining during the past decade, the last five years have seen growers getting out of business at a more rapid pace. Several poor production years and the resultant financial burdens have forced some producers to give up. For the State, the average number of trees per grower in 1996 was 12,549 down 14 percent from 1991. Ridge growers continue to be the largest in the State with an average of 24,359 trees per grower; however, this is over 5,000 trees per grower less than 1991.

Twenty-two percent of the growers in the State have orchards with 10,000 or more trees; eighty-four percent of the total trees in the State are in these orchards. The orchards with 5,000 to 9,999 trees accounted for 9 percent of the trees in the State.

Number of Commercial Peach Growers and Average Number of Trees per Grower, With Percentages, by Regions, South Carolina, 1991 and 1996

Region	Number of Growers		Percent of Total		Average Trees per Grower	
	1991	1996	1991	1996	1991	1996
Upper State	133	91	61.0	59.5	7,199	7,385
Ridge	56	39	25.7	25.5	29,474	24,359
Coastal Plains	29	23	13.3	15.0	19,901	12,957
STATE	218	153	100.0	100.0	14,611	12,549

Number of Commercial Peach Growers and Trees by Size Groups by Regions, South Carolina, 1996

Trees per Grower	Upper State		Ridge		Coastal Plains		State	
	Growers	Total Trees	Growers	Total Trees	Growers	Total Trees	Growers	Total Trees
100 - 499	13	4,400	7	2,100	4	1,300	24	7,800
500 - 999	14	9,700	4	2,900	6	4,700	24	17,300
1,000 - 4,999	33	77,300	7	16,200	10	26,200	50	119,700
5,000 - 9,999	15	105,100	7	59,300	--	--	22	164,400
10,000 +	16	475,500	14	869,500	3	265,800	33	1,610,800
ALL SIZES	91	672,000	39	950,000	23	298,000	153	1,920,000

PEACHES

AGE CHARACTERISTICS OF TREES

Growers seem to be maintaining younger orchards, as nearly 62 percent of the trees reported were less than eight years old. The largest number of peach trees were in the 4 - 8 year old age group. This group comprised over 43 percent of the total trees. The youngest peach trees in the State, those not yet of full bearing age, accounted for about 18 percent of the trees.

The older trees, nine years old and over, made up about 38 percent of the tree population. The 9 -13 year old group had the second highest number of trees of the various age groups, with about 26 percent of the total, while the oldest trees (14 years and older) accounted for a little over 12 percent of the trees.

Number of Peach Trees by Age Groups and by Regions, South Carolina, 1996

Region	Age Group (years)					Total all ages
	1 yr.	2-3 yrs.	4-8 yrs.	9-13 yrs.	14 + yrs.	
	----- Trees -----					
Upper State	33,600	59,900	264,900	179,900	133,700	672,000
Ridge	152,200	103,800	358,200	258,100	77,700	950,000
Coastal Plains	500	1,700	207,300	61,400	27,100	298,000
STATE	186,300	165,400	830,400	499,400	238,500	1,920,000

Percent of Peach Trees by Age Groups and by Regions, South Carolina, 1996

Region	Age Group (years)					Total all ages
	1 yr.	2-3 yrs.	4-8 yrs.	9-13 yrs.	14 + yrs.	
	----- Percent of trees -----					
Upper State	5.0	8.9	39.4	26.8	19.9	100.0
Ridge	16.0	10.9	37.7	27.2	8.2	100.0
Coastal Plains	0.2	0.6	69.5	20.6	9.1	100.0
STATE	9.7	8.6	43.3	26.0	12.4	100.0

VARIETIES IN COMMERCIAL ORCHARDS

"Variety is the spice of life" in South Carolina peach orchards, as producers reported well over one hundred varieties grown around the State. There have been some shifts in the most popular varieties since the 1991 survey, but Redglobe remained the leading variety in South Carolina. Cresthaven, which was not one of the top five varieties in 1991, replaced Harvester as the second leading variety while Blake and Coronet dropped out of the top five and were replaced by Cresthaven and O'Henry. Redglobe remained the leading variety in the Upper State while Redglobe replaced Harvester as the number one variety in the Ridge. Redglobe was also the leading variety in the Coastal Plains, just edging out Flordaking.

Redglobe was the leading variety with 10.5 percent of the total trees in the State. Cresthaven ranks second with 5.5 percent, Harvester was third with 5.4 percent, O'Henry was fourth with 5.2 percent and Redhaven was fifth with 4.5 percent. O'Henry was the leading variety of trees three years of age and younger followed by Redglobe, Classic, and Cresthaven. Data are shown in detail on the next four pages.

PEACHES

Peach Trees in Commercial Orchards, by Variety, According to Year Set Out, SOUTH CAROLINA, 1996 Survey

Variety	Number of trees according to year set out						Total Acres	Trees per Acre	
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1984-88 (9-13 yrs.)	1983 & earlier (14 yrs.+)	Total Trees			Percent of Total Trees
	-----Trees-----						Percent	Acres	Trees
Babygold 1/	4,000	11,400	11,900	31,600	1,500	60,400	3.1	487	124
Blake	400	2,800	11,500	4,700	11,100	30,500	1.6	302	101
Cary Mac	9,100	3,800	46,100	6,500	1,900	67,400	3.4	539	125
Classic	9,600	17,600	7,500	3,400	--	38,100	2.0	145	263
Contender	2,100	1,600	8,000	--	--	11,700	0.6	104	113
Coronet	2,000	6,200	22,000	13,500	7,500	51,200	2.7	487	105
Cresthaven	8,100	18,900	40,400	34,600	3,700	105,700	5.5	885	119
Derby	12,500	1,000	5,100	4,700	2,700	26,000	1.4	249	104
Dixired	2,000	300	6,100	4,200	4,500	17,100	0.9	179	96
Flordaking	--	200	1,400	38,100	--	39,700	2.1	314	126
GaLa	14,000	--	5,900	400	--	20,300	1.1	94	216
Garnet Beauty	--	--	13,100	700	4,100	17,900	0.9	177	101
Goldprince	5,100	400	35,800	--	--	41,300	2.2	361	114
Harvester	100	7,400	59,500	25,300	11,100	103,400	5.4	988	105
Jefferson	200	100	10,700	22,400	8,800	42,200	2.2	418	101
Jerseyqueen	1,200	3,100	5,300	2,800	7,800	20,200	1.1	204	99
June Gold	--	--	6,000	10,000	1,500	17,500	0.9	174	101
Juneprince	--	100	59,100	4,300	1,600	65,100	3.4	584	111
Loring	100	9,700	14,700	16,400	7,500	48,400	2.5	428	113
Monroe	--	1,100	23,000	21,100	7,100	52,300	2.7	507	103
O' Henry	25,500	14,400	34,800	14,500	10,200	99,400	5.2	841	118
Parade	--	400	25,200	23,000	6,100	54,700	2.8	524	104
Redglobe	7,400	20,800	111,000	38,400	24,600	202,200	10.5	1,853	109
Redhaven	4,000	7,600	32,200	25,700	17,100	86,600	4.5	827	105
Rio Oso Gem	--	2,400	14,800	5,000	2,900	25,100	1.3	254	99
Springcrest	--	300	5,900	8,200	600	15,000	0.8	145	103
Summer Lady	11,600	2,500	3,700	--	--	17,800	0.9	133	134
Surecrop	--	4,700	5,500	2,400	2,400	15,000	0.8	104	144
Topaz	8,000	--	6,600	800	300	15,700	0.8	86	183
Winblo	--	100	21,800	16,700	7,000	45,600	2.4	406	112
Other Varieties	59,300	26,500	175,800	120,000	84,900	466,500	24.3	4,201	111
STATE	186,300	165,400	830,400	499,400	238,500	1,920,000	100.0	17,000	113

1/ Includes Babygold 5, 6, 7, 8 and 9.

PEACHES

Peach Trees in Commercial Orchards, by Variety, According to Year Set Out, UPPER STATE, 1996 Survey

Variety	Number of trees according to year set out						Total Acres	Trees per Acre	
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1984-88 (9-13 yrs.)	1983 & earlier (14 yrs.+)	Total Trees			Percent of Total Trees
	----- Trees -----						Percent	Acres	Trees
Babygold 1/	4,000	11,400	8,500	18,100	1,500	43,500	6.5	318	137
Biscoe	400	--	3,500	2,300	3,100	9,300	1.4	94	99
Blake	400	--	5,700	2,900	7,900	16,900	2.5	167	101
Cary Mac	--	2,000	4,000	3,800	1,900	11,700	1.7	88	133
Coronet	--	--	2,600	2,300	2,500	7,400	1.1	61	121
Cresthaven	2,600	9,200	11,400	2,800	3,700	29,700	4.4	206	144
Dixired	--	--	3,200	2,200	1,200	6,600	1.0	72	92
Fay Elberta	--	--	3,800	1,500	5,000	10,300	1.5	103	100
Garnet Beauty	--	--	1,200	500	4,100	5,800	0.9	57	102
Harvester	--	--	1,500	3,300	3,300	8,100	1.2	85	95
Jefferson	200	100	2,200	4,700	1,300	8,500	1.3	79	108
Jerseyqueen	1,100	3,000	4,600	2,500	6,800	18,000	2.7	177	102
Loring	--	5,000	9,100	2,500	5,100	21,700	3.2	169	128
Monore	--	1,100	12,200	10,500	6,900	30,700	4.6	309	99
O'Henry	9,000	6,900	17,200	7,300	8,600	49,000	7.3	412	119
Parade	--	400	14,100	15,400	2,000	31,900	4.7	307	104
Redglobe	800	6,500	40,700	25,800	16,500	90,300	13.4	867	104
Redhaven	--	--	9,500	9,000	9,500	28,000	4.2	268	105
Rio Oso Gem	--	2,400	14,800	4,900	2,800	24,900	3.7	253	98
Stagg	--	--	1,400	6,500	800	8,700	1.3	87	100
Summer Lady	10,800	1,400	3,700	--	--	15,900	2.4	114	139
Surecrop	--	1,700	4,300	--	2,100	8,100	1.2	59	137
Tyler	--	--	--	5,700	1,800	7,500	1.1	66	114
Winblo	--	100	4,300	5,300	4,200	13,900	2.1	121	115
Other Varieties	4,300	8,700	81,400	40,100	31,100	165,600	24.6	1,561	106
REGION	33,600	59,900	264,900	179,900	133,700	672,000	100.0	6,100	110

1/ Includes Babygold 5, 6, 7, 8 and 9.

PEACHES

Peach Trees in Commercial Orchards, by Variety, According to Year Set Out, RIDGE, 1996 Survey

Variety	Number of trees according to year set out						Total Acres	Trees Per Acre	
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1984-88 (9-13 yrs.)	1983 & earlier (14 yrs+)	Total Trees			Percent of Total Trees
	----- Trees -----						Percent	Acres	Trees
Babygold 1/	--	--	3,400	11,000	--	14,400	1.5	143	101
Blake	--	2,800	5,800	1,800	2,000	12,400	1.3	124	100
Cary Mac	9,100	1,800	17,800	1,900	--	30,600	3.2	239	128
Classic	9,600	17,600	7,500	3,400	--	38,100	4.0	145	263
Contender	2,100	800	7,500	--	--	10,400	1.1	97	107
Coronet	2,000	6,200	18,400	11,000	3,400	41,000	4.3	398	103
Cresthaven	5,500	9,700	24,400	27,400	--	67,000	7.1	608	110
Derby	10,000	1,000	5,100	3,500	2,500	22,100	2.3	217	102
Dixired	2,000	300	2,900	1,800	3,300	10,300	1.1	103	100
Garnet Beauty	--	--	11,900	200	--	12,100	1.3	120	101
Goldprince	5,100	400	7,800	--	--	13,300	1.4	87	153
Harvester	--	7,400	32,000	18,300	7,000	64,700	6.8	638	101
Jefferson	--	--	8,400	17,200	7,500	33,100	3.5	332	100
Juneprince	--	--	20,100	6,000	1,400	27,500	2.9	269	102
Loring	100	4,700	2,500	13,300	1,100	21,700	2.3	216	100
Monroe	--	--	4,100	10,000	--	14,100	1.5	136	104
O'Henry	16,500	7,500	12,500	7,200	1,400	45,100	4.8	386	117
Parade	--	--	10,800	7,600	3,900	22,300	2.3	213	105
Redglobe	6,600	14,300	32,500	12,000	6,500	71,900	7.6	667	108
Redhaven	4,000	7,600	21,800	16,500	7,200	57,100	6.0	545	105
Springcrest	--	300	3,800	7,800	600	12,500	1.3	121	103
Winblo	--	--	3,900	10,700	2,600	17,200	1.8	172	100
Other Varieties	79,600	21,400	93,300	69,500	27,300	291,100	30.6	2,324	126
REGION	152,200	103,800	358,200	258,100	77,700	950,000	100.0	8,300	114

1/ Includes Babygold 5, 6, 7, 8 and 9.

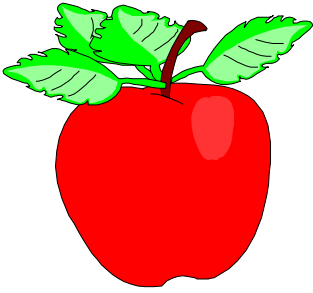
PEACHES

Peach Trees in Commercial Orchards, by Variety, According to Year Set Out, COASTAL PLAINS, 1996 Survey

Variety	Number of trees according to year set out						Total Acres	Trees per Acre	
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1984-88 (9-13 yrs.)	1983 & earlier (14 yrs.+)	Total Trees			Percent of Total Trees
	-----Trees-----						Percent	Acres	Trees
Babygold 1/	--	--	--	2,500	--	2,500	0.8	25	100
Cary Mac	--	--	24,300	800	--	25,100	8.4	211	119
Coronet	--	--	1,000	200	1,600	2,800	0.9	27	104
Cresthaven	--	--	4,600	4,400	--	9,000	3.0	72	125
Elberta	--	--	800	400	1,000	2,200	0.7	25	88
Flordaking	--	200	500	38,100	--	38,800	13.1	301	129
Goldprince	--	--	28,000	--	--	28,000	9.4	274	102
Harvester	100	--	26,000	3,700	800	30,600	10.3	264	116
Juneprince	--	--	36,200	--	200	36,400	12.2	310	117
Loring	--	--	3,100	600	1,300	5,000	1.7	42	119
Monroe	--	--	6,700	600	200	7,500	2.5	62	121
O'Henry	--	--	5,100	--	200	5,300	1.8	45	118
Redglobe	--	--	37,800	600	1,600	40,000	13.4	323	124
Sunprince	--	--	6,500	--	--	6,500	2.2	64	102
Winblo	--	--	13,600	700	200	14,500	4.9	113	128
Other Varieties	400	1,500	13,100	8,800	20,000	43,800	14.7	442	99
REGION	500	1,700	207,300	61,400	27,100	298,000	100.0	2,600	115

1/ Includes Babygold 5, 6, 7, 8 and 9.

APPLES



There were 3,000 acres devoted to apple production in 1996, down 15 percent from 1991 and 22 percent below 1988. Apple tree numbers, at 660,000, were down 4 percent from 1991, but still 2 percent above 1988. The tree population is aging as over 82 percent of the trees were over nine years old in 1996 compared to 1991 when only 47 percent of the trees had been in the ground nine years or longer. Dwarf and semi-dwarf rootstocks continued their climb in popularity as over 94 percent of all trees reported were on this type of rootstock. The top counties, based on tree numbers, were Laurens, Oconee and Spartanburg and the top varieties were Granny Smith, Red Delicious and Yellow Delicious. More detailed information is shown below; however, confidentiality restrictions prevent us from publishing some county and variety information.

GROWER NUMBERS, LOCATION AND SIZE

There were 56 commercial apple growers in South Carolina in 1996 one-third fewer than in 1991. The largest growers, with 3,000 or more trees, accounted for only 28 percent of all growers but controlled 94 percent of all trees; the smallest growers accounted for 48 percent of total commercial operations but controlled only about 2 percent of the trees.

**Number of Commercial Apple Growers and Trees by Size Groups,
by Counties, South Carolina, 1996**

Trees per Grower	Oconee		Spartanburg		Other Counties		State	
	Growers	Total Trees	Growers	Total Trees	Growers	Total Trees	Growers	Total Trees
	-----Number-----							
100-999	7	3,800	11	5,200	9	2,300	27	11,300
1,000-2,999	7	13,900	3	5,400	3	7,000	13	26,300
3,000 and over	6	199,300	7	148,400	3	274,700	16	622,400
ALL SIZES	20	217,000	21	159,000	15	284,000	56	660,000

APPLES

GROWERS, ACREAGE AND TREE NUMBERS BY ROOTSTOCK

The total number of apple trees in South Carolina in 1996 was 660,000. Dwarf and semi-dwarf rootstocks continued to be the most popular, accounting for 94 percent of the total trees, up 5 percent from 1991.

Number of Commercial Apple Growers, Acreage and Number of Trees, by Rootstock, and County, South Carolina, 1996

Counties and Rootstock	Growers	Acres	Trees of all ages	Average trees per acre	Average trees per grower
-----Number-----					
OCONEE AND SPARTANBURG:					
Dwarf and semi-dwarf	37	1,780	345,700	194	9,343
Standard	17	300	30,300	101	1,782
Total	41 <u>1/</u>	2,080	376,000	181	9,171
OTHER 2/:					
Dwarf and semi-dwarf	14	820	275,300	336	19,664
Standard	4	100	8,700	87	2,175
Total	15 <u>1/</u>	920	284,000	309	18,933
STATE:					
Dwarf and semi-dwarf	51	2,600	621,000	239	12,176
Standard	21	400	39,000	98	1,857
STATE	56 <u>1/</u>	3,000	660,000	220	11,786

1/ Non-additive due to growers having both rootstocks.

2/ Includes Anderson, Cherokee, Colleton, Greenville, Kershaw, Laurens, Lexington, Pickens, Saluda, Sumter, and York Counties.

INTENTIONS TO SET AND REMOVE TREES

Following the relative poor 1996 season, many growers had some indecision as to future plans, however apple growers reported intentions to set 3,500 more trees than they planned to remove. Spartanburg and Oconee Counties are expected to lose 2,500 trees. However, increased plantings in other counties will provide a Statewide gain of less than 1 percent with 663,500 total trees anticipated in 1997.

Intentions to Set and Remove Apple Trees, Present and Net Trees, by County, South Carolina 1996

County	Grower's Intentions <u>1/</u>			Present	Present Plus Intentions
	To Be Set	To Be Removed	Net Change		
-----Number of Trees-----					
Oconee	8,000	9,500	(1,500)	217,000	215,500
Spartanburg	1,500	2,500	(1,000)	159,000	158,000
Other	6,500	500	+6,000	284,000	290,000
STATE	16,000	12,500	+3,500	660,000	663,500

1/ Intentions to set and remove trees after 1996 and in early 1997.

APPLES

VARIETIES AND TREE AGES

As was the case in 1991, Granny Smith continued to be the leading apple variety in South Carolina, but Red Delicious accounted for 25 percent of the State's trees while Yellow Delicious accounted for 13 percent of the trees. Granny Smith variety data cannot be published separately due to disclosure regulations.

Fifty-two percent of the trees in South Carolina were in the age group of 9 to 13 years, and another 30 percent were over 14 years old, only about 3 percent of the trees reported were 1 to 3 years old.

SOUTH CAROLINA

Number of Commercial Apple Trees for Selected Varieties, by Year Set Out, 1996 Survey

Varieties	Number of Trees According to Year Set Out							Total Trees of All Ages	Percent of State Total	Total Acres
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1984-88 (9-13 yrs.)	1979-83 (14-18 yrs.)	1974-78 (19-23 yrs.)	1973 & earlier (24 yrs +)			
Delicious:										
Red	500	600	16,900	45,300	29,900	42,400	26,900	162,500	24.6	970
Yellow	2,600	2,100	14,500	23,600	22,200	11,300	11,900	88,200	13.4	610
Arkansas Black	--	100	300	1,200	2,700	1,100	100	5,500	0.8	40
Fuji	--	200	8,500	--	--	--	--	8,700	1.3	35
Gala	5,300	300	8,500	100	--	--	--	14,200	2.2	55
Winesap	--	400	200	7,600	400	4,300	100	13,000	2.0	70
Others ^{1/}	3,500	4,100	48,100	268,700	42,000	1,500	--	367,900	55.7	1,220
STATE	11,900	7,800	97,000	346,500	97,200	60,600	39,000	660,000	100.0	3,000

^{1/} Others include a combination of 15 additional varieties, plus unknown and mixed plantings.

Number of Commercial Apple Trees for Selected Varieties, by County, by Year Set Out, 1996 Survey

Varieties	Number of Trees According to Year Set Out							Total Trees of All Ages	Percent of County Total	Total Acres
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1981-88 (9-13 yrs.)	1979-83 (14-18 yrs.)	1974-78 (19-23 yrs.)	1973 & earlier (24 yrs.+)			

OCONEE

Delicious:										
Red	--	500	14,000	20,000	23,800	41,600	25,500	125,400	57.8	705
Yellow	--	--	3,600	4,900	3,800	10,900	11,600	34,800	16.0	195
Others	1,500	3,300	18,100	20,100	7,800	5,700	300	56,800	26.2	260
COUNTY	1,500	3,800	35,700	45,000	35,400	58,200	37,400	217,000	100.0	1,160

SPARTANBURG

Delicious:										
Red	500	--	1,200	13,000	3,100	800	700	19,300	12.1	165
Yellow	2,600	2,000	10,800	5,600	18,400	300	100	39,800	25.0	365
Others	2,500	1,600	36,300	58,000	1,200	300	--	99,900	62.9	390
COUNTY	5,600	3,600	48,300	76,600	22,700	1,400	800	159,000	100.0	920

GRAPES



The South Carolina grape industry continued on a downward trend as grape acreage fell to 255 acres in 1996, 7 percent below 1991. The continued decline in Muscadine types, which were down 11 percent from 1991, more than offset a 19 percent increase in Bunch type grapes. Despite the acreage decrease since 1991, there were 2 more growers in 1996.

Acres of Grape Vines in Commercial Vineyards, Varieties by Age Groups, South Carolina, 1996 Survey

Variety	Acres of Vines According to Year Set Out							Percent of Total
	1996 (1 yr.)	1994-95 (2-3 yrs.)	1989-93 (4-8 yrs.)	1984-88 (9-13 yrs.)	1979-83 (14-18 yrs.)	1978 & earlier (19 yrs +)	Total Acres of All Ages	
Bunch Types <u>1/</u>	1	1	20	11	10	--	43	17
All Muscadine Types	1	13	29	71	71	27	212	83
STATE	2	14	49	82	81	27	255	100

1/ Includes table and wine varieties.

INTENTIONS TO SET AND REMOVE VINES

Number of Vineyards, Total Acres in Commercial Vineyards, and Intentions to Plant and Remove Vines in South Carolina, 1991 and 1996 Surveys

STATE	Number of Vineyards		Total Acres of Grapes		Intentions <u>1/</u>			
					Acres to be Set		Acres to be Removed	
	1991	1996	1991	1996	1991	1996	1991	1996
	41	43	274	255	2	3	--	1

1/ Intentions to remove and plant vines after the 1996 harvest and in early 1997.

NECTARINES

During the survey, growers were asked to report the acreage and tree numbers of any other fruits they were growing. In addition, to their apples, grapes, and peaches, they reported a few acres of pears and plums but also about 255 acres of nectarines with 30,000 trees of all ages. About two-thirds of the nectarines reported were being grown in the Upper State region while the other one-third were in the Ridge and Coastal Plains regions.