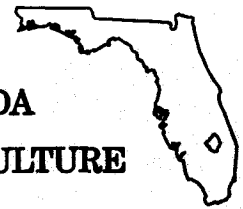




Florida Agricultural Statistics Service  
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# CITRUS

## COMMERCIAL CITRUS TREE INVENTORY PRELIMINARY REPORT



# FLORIDA AGRICULTURE

September 14, 1992

### ALL CITRUS UP TO 791,290 ACRES

Florida's 1992 Commercial Citrus Tree Inventory shows 791,290 acres, the largest acreage recorded since 1982. This is an 8 percent increase from the 1990 inventory of 732,767 acres. There are now more than 92 million all citrus trees, which is an all time record. The current biennial census registers 133,227 acres of citrus planted in 1990 and 1991. These new plantings are the largest for any two year interim period since the first inventory in 1966. Only nine of thirty-two citrus growing counties showed net acreage decreases, and only six showed a decline in the number of trees.

St. Lucie, Polk, and Hendry counties have the most acreage with the order changing to Hendry, St. Lucie, and Polk counties for the largest number of trees. Average trees per acre are 146 in Hendry, 108 in St. Lucie, and 103 in Polk.

The Gulf Citrus area of Charlotte, Collier, Glades, Hendry, and Lee counties showed an increase from 126,252 acres in 1990 to 157,239 acres in 1992. The 25 percent increase in net acres is exceeded by the 32 percent increase in tree numbers for the same period.

### ORANGE ACREAGE INCREASES TO 608,636 ACRES

All oranges as of January 1992 totaled 608,636 acres, an 8 percent increase from the 564,809 acres reported in 1990. Tree numbers, however, have increased 16 percent in the last two years because of high density plantings in new groves. The current inventory shows a record 72.8 million trees, with nearly a third (32 percent) planted in 1989, 1990 and 1991.

Hamlin orange acreage at 195,137 continued to increase, now 14 percent more than the 171,518 acres reported in 1990. Valencia acreage increased 9 percent from 246,483 in 1990 to 269,074 acres in 1992. Navel acreage showed a 16 percent increase in the last two years. There are 22,183 acres of Navels now compared to 19,067 in 1990.

Bearing acreage for all oranges is up 11 percent from 1990. There are 444,421 acres as of 1992 compared to 399,505 in 1990. Bearing acreage for the 1991-92 season contained those trees set in 1988 and earlier (3 years and older). For 1988 and earlier censuses, bearing acreage included trees 4 years and older.

### GRAPEFRUIT INCREASES TO 135,166 ACRES

Grapefruit shows a net increase of 9,866 acres, or 8 percent, in the past two years. This increase is largely attributed to the 21 percent gain in colored varieties from 57,762 acres in 1990 to 70,151 acres in 1992. White seedless grapefruit acreage is 54,108, a 3 percent increase from the 52,314 acres in 1990. Seedy grapefruit acreage continues to decline. There are 5,187 acres in 1992 compared to 7,300 acres in 1990 and 8,903 acres in 1988.

A decline in bearing acreage of white seedless and seedy grapefruit was offset by a 15 percent increase in colored seedless. Bearing acreage of all grapefruit is up 2 percent to 104,719 compared with 102,959 acres two years ago.

### SPECIALTY ACREAGE UP 11 PERCENT

The specialty citrus types increased 11 percent in total acreage to 47,488 acres in 1992 from 42,658 acres in 1990. However, Temples, Dancy tangerines, lemons, and limes continue to show declines in acreage.

### FLORIDA COMMERCIAL CITRUS ACREAGE

Census years	Oranges	Grapefruit	Specialty fruit	Total
1966	673,086	103,224	81,772	858,082
1968	713,400	119,883	97,966	931,249
1970	715,806	124,050	101,615	941,471
1972	659,418	124,142	94,459	878,019
1974	642,431	130,326	91,341	864,098
1976	628,567	137,909	85,893	852,369
1978	616,020	136,342	78,873	831,235
1980	627,174	139,944	78,165	845,283
1982	636,864	139,939	71,053	847,856
1984	573,991	134,680	52,694	761,365
1986	466,252	117,845	40,395	624,492
1988	536,737	119,606	41,586	697,929
1990	564,809	125,300	42,658	732,767
1992	608,636	135,166	47,488	791,290

Sunburst and Honey tangerines continue to increase. Repeating the 1988 to 1990 increase, Sunburst tangerines increased another 97 percent from 3,565 acres in 1990 to 7,039 acres in 1992. This is nearly four times the 1,813 acres reported in 1988. Honey tangerines increased 12 percent to 6,376 acres in 1992 from 5,712 acres in 1990.

Orlando tangelos, which comprise 69 percent of the tangelos acreage, are up 12 percent over the previous Census. This brings the total Orlando acreage to 8,445 acres in 1992, up from 7,514 acres in 1990. There are also 2,705 acres of Minneola tangelos, up 10 percent from 2,470 acres in 1990.

### FLORIDA COMMERCIAL CITRUS ACREAGE: Changes between censuses

Census years	Two year change		Net change	Total
	Gross loss	New plantings		
1966	(First census via aerial photography)			858,082
1968	13,910	87,077	+73,167	931,249
1970	26,114	36,336	+10,222	941,471
1972 <sup>1/</sup>	82,948	19,496	-63,452	878,019
1974	40,181	26,260	-13,921	864,098
1976	40,518	28,789	-11,729	852,369
1978 <sup>1/</sup>	49,127	27,993	-21,134	831,235
1980	25,925	39,973	+14,048	845,283
1982 <sup>1/</sup>	51,942	54,515	+2,573	847,856
1984 <sup>1/</sup>	159,719	73,228	-86,491	761,365
1986 <sup>1/</sup>	185,598	48,725	-136,873	624,492
1988	52,240	125,677	+73,437	697,929
1990 <sup>1/</sup>	85,858	120,696	+34,838	732,767
1992	74,704	133,227	+58,523	791,290

<sup>1/</sup> January freezes in 1971, 1977, 1981, 1982, 1985, and 1986. December freezes in 1983, 1985, and 1989.



**ALL FLORIDA CITRUS: Inventory of commercial acres by variety  
and year set, as of 1992**

Year set	Grapefruit		Temples	Tangelos	Tangerines				Other citrus
	Unidentified	Total			Sunburst	Robinson	Dancy	Honey	
	Acres								
PRE-1948	0	7,887	660	152	0	0	355	0	45
1948-57	0	4,583	1,149	591	0	0	60	61	96
1958-67	0	29,358	3,692	4,466	0	400	386	1,905	1,094
1968	0	3,186	118	346	0	33	32	143	292
1969	0	2,025	78	233	0	58	39	60	159
1970	0	1,429	136	185	0	57	56	21	74
1971	0	2,535	22	35	0	31	2	11	33
1972	0	2,454	52	109	0	34	13	52	65
1973	0	4,773	35	46	0	22	12	3	247
1974	0	4,100	28	15	0	8	3	1	153
1975	0	2,783	26	69	0	8	15	51	246
1976	0	1,733	14	55	0	34	27	32	384
1977	0	2,438	15	33	0	9	19	43	673
1978	0	2,543	33	89	0	7	6	27	479
1979	0	2,422	50	46	0	24	21	287	1,108
1980	0	1,367	35	46	21	18	18	121	906
1981	2	2,346	89	90	41	88	6	113	206
1982	0	3,304	46	87	85	22	11	59	72
1983	0	3,270	120	178	194	50	27	238	295
1984	0	2,672	73	193	191	34	29	92	158
1985	0	984	37	122	146	61	28	231	499
1986	2	2,530	221	497	300	89	92	266	203
1987	15	6,848	243	936	967	269	100	423	383
1988	137	7,149	173	1,187	1,526	158	186	483	439
<b>TOTAL BEARING</b>	<b>156</b>	<b>104,719</b>	<b>7,145</b>	<b>9,806</b>	<b>3,471</b>	<b>1,514</b>	<b>1,543</b>	<b>4,723</b>	<b>8,309</b>
1989	267	10,917	432	1,004	1,365	485	61	741	835
1990	2,494	9,137	103	651	934	143	51	534	424
1991	2,803	10,393	198	715	1,269	219	22	378	413
<b>NON-BEARING</b>	<b>5,564</b>	<b>30,447</b>	<b>733</b>	<b>2,370</b>	<b>3,568</b>	<b>847</b>	<b>134</b>	<b>1,653</b>	<b>1,672</b>
<b>TOTAL</b>	<b>5,720</b>	<b>135,166</b>	<b>7,878</b>	<b>12,176</b>	<b>7,039</b>	<b>2,361</b>	<b>1,677</b>	<b>6,376</b>	<b>9,981</b>



**ALL FLORIDA CITRUS: Inventory of commercial trees by variety  
and year set, as of 1992**

Year set	Grapefruit		Temple	Tangelos	Tangerines				Other citrus
	Unidentified	Total			Sunburst	Robinson	Dancy	Honey	
	1,000 Trees								
PRE-1948	0.0	584.8	53.6	12.1	0.0	0.0	28.1	0.1	6.0
1948-57	0.0	320.6	96.5	42.2	0.0	0.0	5.1	5.0	11.4
1958-67	0.0	2,449.9	386.4	431.7	0.0	48.5	34.7	217.0	147.9
1968	0.0	273.6	12.2	34.7	0.0	4.5	3.1	16.4	51.0
1969	0.0	186.6	8.6	26.2	0.0	7.4	4.6	6.4	26.0
1970	0.0	129.1	13.7	20.6	0.0	7.6	6.3	2.2	11.0
1971	0.0	218.7	2.6	4.4	0.0	4.5	0.2	1.0	5.5
1972	0.0	224.0	5.6	13.1	0.0	4.2	1.1	6.6	8.8
1973	0.0	428.4	4.2	4.7	0.0	2.7	1.2	0.3	44.0
1974	0.0	400.8	2.9	1.3	0.0	1.0	0.2	0.2	25.7
1975	0.0	255.5	2.6	7.3	0.0	1.2	1.3	6.0	40.1
1976	0.0	157.9	1.1	5.1	0.0	4.5	2.7	3.9	48.4
1977	0.0	234.4	2.0	4.7	0.0	1.4	2.0	4.5	109.7
1978	0.0	230.2	3.9	9.3	0.0	1.0	0.4	3.0	73.3
1979	0.0	228.6	4.7	4.8	0.0	2.9	2.0	26.4	164.3
1980	0.0	134.9	3.1	4.5	2.6	2.3	1.6	19.7	146.4
1981	0.1	230.1	9.6	9.1	4.6	10.8	0.6	13.5	26.2
1982	0.0	308.5	5.2	8.5	10.1	2.6	1.0	5.9	12.9
1983	0.0	322.0	13.1	21.0	22.9	6.9	2.4	27.6	40.9
1984	0.0	292.5	9.0	22.6	23.8	3.9	3.0	12.2	24.9
1985	0.0	105.4	4.4	16.3	19.5	9.1	2.6	35.0	73.2
1986	0.2	281.2	28.7	62.2	42.7	12.1	10.5	34.7	35.7
1987	1.6	763.4	28.3	128.6	140.1	40.9	9.0	60.2	51.1
1988	16.2	795.8	18.3	155.4	212.0	26.3	24.7	62.6	68.8
<b>TOTAL BEARING</b>	<b>18.1</b>	<b>9,556.9</b>	<b>720.3</b>	<b>1,050.4</b>	<b>478.3</b>	<b>206.3</b>	<b>148.4</b>	<b>570.4</b>	<b>1,253.2</b>
1989	38.7	1,265.1	50.2	137.5	209.7	72.2	5.9	119.4	122.8
1990	286.7	1,074.4	12.1	97.5	153.8	21.8	4.4	100.9	72.4
1991	313.8	1,222.8	22.6	92.4	195.2	28.2	2.5	51.4	70.0
<b>NON-BEARING</b>	<b>639.2</b>	<b>3,562.3</b>	<b>84.9</b>	<b>327.4</b>	<b>558.7</b>	<b>122.2</b>	<b>12.8</b>	<b>271.7</b>	<b>265.2</b>
<b>TOTAL</b>	<b>657.3</b>	<b>13,119.2</b>	<b>805.2</b>	<b>1,377.8</b>	<b>1,037.0</b>	<b>328.5</b>	<b>161.2</b>	<b>842.1</b>	<b>1,518.4</b>

**ALL FLORIDA CITRUS: Acreage and tree numbers in commercial groves by county, 1986 to 1992**

County	Acreage in commercial groves				Trees in commercial groves			
	1986	1988	1990	1992	1986	1988	1990	1992
	Acres				1,000 trees			
Brevard	11,676	11,641	10,519	11,084	1,143.2	1,132.5	1,045.3	1,159.4
Broward	1,276	764	589	365	95.8	54.6	40.9	25.9
Charlotte	8,759	9,345	11,718	15,981	852.9	926.5	1,241.4	1,939.7
Citrus	75	191	103	200	5.2	17.1	10.9	19.7
Collier	10,063	17,309	23,565	34,167	1,140.3	2,200.2	3,204.1	4,869.9
Dade	6,976	6,656	6,305	6,076 <sup>1/</sup>	1,120.3	1,060.1	1,000.7	963.1 <sup>1/</sup>
DeSoto	36,042	43,143	52,584	58,058	3,769.2	4,782.4	6,256.7	7,206.1
Glades	6,076	6,235	7,523	9,136	572.6	613.7	890.0	1,265.8
Hardee	42,751	45,898	51,069	52,630	3,730.2	4,269.4	5,066.6	5,445.9
Hendry	40,269	54,953	73,754	87,396	4,635.6	7,051.9	10,387.9	12,797.2
Hernando	167	695	598	1,035	20.5	77.1	73.9	122.9
Highlands	46,012	48,569	57,048	62,217	4,176.6	4,806.0	6,169.6	7,295.4
Hillsborough	23,754	25,507	26,007	27,120	1,967.8	2,233.2	2,373.4	2,582.2
Indian River	64,302	65,162	66,116	65,446	5,648.5	5,850.4	6,224.7	6,377.0
Lake	13,523	26,228	13,960	18,604	1,241.1	2,749.8	1,665.5	2,398.5
Lee	7,313	8,247	9,692	10,559	792.4	929.4	1,169.3	1,364.1
Manatee	15,688	18,779	20,331	20,919	1,360.4	1,773.4	2,056.2	2,248.2
Marion	329	1,209	277	917	29.3	129.0	31.6	113.1
Martin	41,095	40,921	46,283	46,335	4,222.9	4,395.9	5,273.5	5,622.2
Okeechobee	7,449	8,124	8,541	10,439	701.3	784.0	823.4	1,099.0
Orange	14,692	17,356	8,399	9,470	1,164.9	1,532.4	790.1	1,049.5
Osceola	13,035	14,114	16,101	15,625	1,046.2	1,238.4	1,599.7	1,603.8
Palm Beach	15,198	14,887	15,545	14,787	1,580.5	1,607.9	1,748.3	1,715.7
Pasco	3,903	9,371	6,937	10,828	407.9	1,091.2	862.8	1,382.9
Pinellas	394	276	218	208	32.7	23.1	17.2	16.9
Polk	106,993	108,546	99,732	91,899	8,274.1	9,133.4	9,038.6	9,511.1
Putnam	14	46	20	75	1.4	5.7	3.0	11.6
St. Lucie	82,770	88,893	94,878	105,117	7,463.0	8,405.5	9,402.4	11,364.8
Sarasota	1,568	1,929	2,127	2,065	143.0	191.0	218.0	212.1
Seminole	1,194	1,440	1,024	1,206	92.6	114.7	88.2	110.3
Sumter	116	116	6	0	11.8	11.8	0.6	0.0
Volusia	1,020	1,379	1,198	1,326	84.6	116.5	106.8	121.7
<b>Total</b>	<b>624,492</b>	<b>697,929</b>	<b>732,767</b>	<b>791,290</b>	<b>57,528.8</b>	<b>69,308.2</b>	<b>78,881.3</b>	<b>92,015.7</b>

1/ Surveyed in November 1990.

**ALL FLORIDA CITRUS: Acreage and tree numbers in commercial groves by variety 1986 to 1992**

County	Acreage in commercial groves				Trees in commercial groves			
	1986	1988	1990	1992	1986	1988	1990	1992
	Acres				1,000 trees			
<b>ORANGES:</b>								
Hamlin	115,789	151,665	171,518	195,137	11,135.6	15,797.4	19,271.2	23,210.0
Navel	13,236	18,295	19,067	22,183	1,296.1	1,918.2	2,117.3	2,581.1
Other early	15,198	16,881	16,532	21,842	1,316.7	1,625.4	1,726.6	2,669.4
Pineapple	67,837	65,670	62,997	58,632	6,347.5	6,429.1	6,538.6	6,447.9
Other mids	6,304	5,590	4,582	3,794	449.9	404.3	350.4	337.9
Valencia	207,163	224,868	246,483	269,074	18,720.8	22,240.0	26,974.7	32,478.2
Unidentified	40,725	53,768	43,630	37,974	4,194.4	6,122.2	5,634.6	5,101.8
Sub-Total	466,252	536,737	564,809	608,636	43,461.4	54,536.6	62,613.4	72,826.3
<b>GRAPEFRUIT:</b>								
Seedy	10,326	8,903	7,300	5,187	696.8	625.9	547.7	423.3
White seedless	54,761	53,084	52,314	54,108	4,324.2	4,267.0	4,338.4	4,854.8
Colored seedless	47,004	51,443	57,762	70,151	4,015.9	4,567.1	5,430.9	7,183.8
Unidentified	5,754	6,176	7,924	5,720	587.1	621.2	876.2	657.3
Sub-Total	117,845	119,606	125,300	135,166	9,624.0	10,081.2	11,193.2	13,119.2
<b>SPECIALTY:</b>								
Temples	10,251	9,942	8,861	7,878	933.2	927.9	868.3	805.2
Orlando Tangelos	6,905	7,734	7,514	8,445	638.4	745.4	772.8	953.0
Minneola Tangelos	2,058	2,265	2,470	2,705	188.9	218.5	257.1	294.5
Other Tangelos	899	967	1,127	1,026	104.7	115.2	143.6	130.3
Sunburst Tangerines			3,565	7,039			484.0	1,037.0
Robinson Tangerines	2,278	1,938	1,956	2,361	268.8	232.4	253.2	328.5
Dancy Tangerines	2,919	2,345	2,142	1,677	238.9	195.7	196.7	161.2
Honey Tangerines	4,845	5,093	5,712	6,376	540.2	596.0	693.7	842.1
Limes	7,238	7,079	6,864	6,638 <sup>1/</sup>	1,141.9	1,110.4	1,069.6	1,028.6 <sup>1/</sup>
True Lemons	1,547	946	844	626	214.5	153.0	138.5	103.0
Meyer Lemons	167	150	78	75	24.2	23.5	14.3	14.2
Other Citrus	1,288	3,127	1,525	2,642	149.7	372.4	182.9	372.6
Sub-Total	40,395	41,586	42,658	47,488	4,443.4	4,690.4	5,074.7	6,070.2
<b>Total Citrus</b>	<b>624,492</b>	<b>697,929</b>	<b>732,767</b>	<b>791,290</b>	<b>57,528.8</b>	<b>69,308.2</b>	<b>78,881.3</b>	<b>92,015.7</b>

<sup>1/</sup> Dade Lime acreage surveyed November 1990.

**CITRUS ACREAGE IN FLORIDA AS OF JANUARY 1990 AND 1992 BY FRUIT TYPES AND PRODUCTION AREAS**

Areas	Oranges		Grapefruit		Specialty types		Total	
	1990	1992	1990	1992	1990	1992	1990	1992
	Acres							
Indian River Mkt. Dist.	93,756	95,930	83,092	90,911	7,833	8,160	184,681	195,001
Northern	27,870	36,667	1,136	1,644	2,724	4,574	31,730	42,885
Central	143,576	143,686	17,760	13,698	9,940	10,571	171,276	167,955
Western	141,230	148,571	5,662	5,775	5,459	6,654	152,351	161,000
Southern	158,377	183,782	17,650	23,138	16,702	17,529	192,729	224,449
<b>Total</b>	<b>564,809</b>	<b>608,636</b>	<b>125,300</b>	<b>135,166</b>	<b>42,658</b>	<b>47,488</b>	<b>732,767</b>	<b>791,290</b>

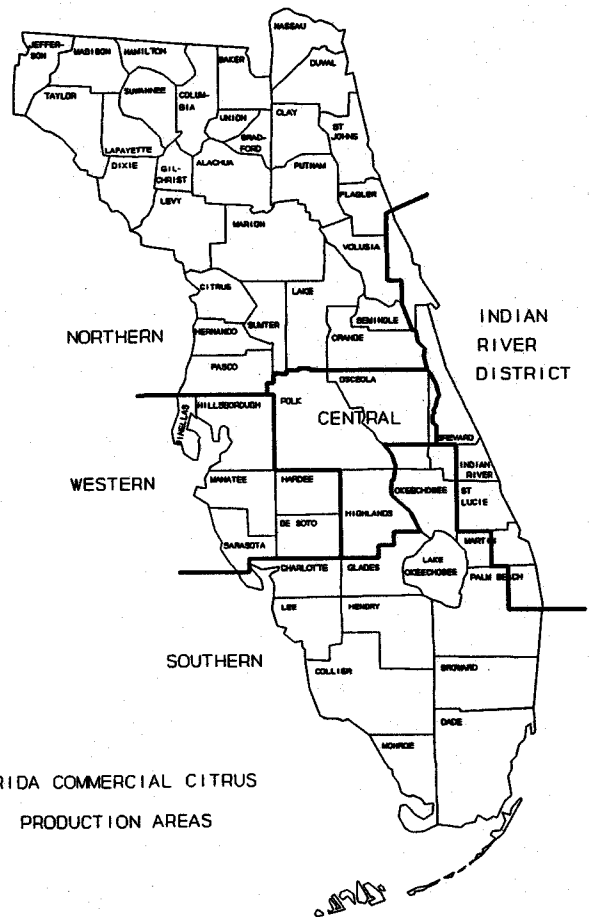
**CITRUS CENSUS PROCEDURES**

This Biennial Census, the 14th in a series which began in January 1966, was conducted using current aerial photography. Aerial photos of the 14,000 square miles covering virtually all of Florida's citrus were taken during a four month period beginning the first of November 1991.

The census procedure starts with a complete mapping and indexing of all citrus plantings onto scaled photo enlargements from the previous census. Aided by stereoscopic viewing, the current aerial photos are compared with photos from the previous census to detect grove changes, tree removals and new tree plantings. Each change observed by the photo interpreter is followed by a visit and ground check which usually results in a revised tree count for the grove. The ground checks are performed by experienced field personnel. Acreages are measured from photo enlargements with a digital planimeter. Tree numbers are from actual tree counts or expansions from measured acreages. Block sizes are reduced as necessary for excessive counts of dead trees or empty spaces, as well as barnyards, turn rows, swale ditches and irrigation ponds.

A record for each separate planting or block is maintained in the data system. A new record is created for each new planting, and records for plantings no longer existing are removed. Because of frequent recent changes, more than eighty percent of the variety blocks in the citrus belt were visited for updates or corrections during the 1992 census. Usually, in non-freeze years, less than one third of all blocks require visitations to complete a biennial tree census. Many grove changes made in this census resulted from general grove rehabilitation. The availability of trees has greatly increased new plantings and resetting in older groves.

Much of the credit for completing the field work for the Census goes to the Division of Plant Industry, which assisted with eight trained citrus technologists and four wheel drive vehicles.



Production areas were redesigned in 1986 to give greater efficiency for objective forecasting purposes. The principal change was to place all the northern cold prone regions in a single area. The Indian River Marketing District was set apart, as was the southern flatwoods plantings. This stratification provides greater homogeneity within each sampling stratum. Current tree census statistics by production area are directly comparable with 1986 through 1990 census data. However, the establishment of newly defined areas resulted in a loss of comparative data for earlier years.

This publication was produced at an annual cost of 478.43 or 0.13 cents per copy to inform citrus growers and others of trends in Florida citrus production. M92T5