



CITRUS COMMERCIAL CITRUS INVENTORY
PRELIMINARY REPORT

Cooperating with the Florida Department of Agriculture and Consumer Services
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All Citrus Acreage Down 5 Percent

Results of the annual Commercial Citrus Inventory show total citrus acreage is 454,973 acres, down 5 percent from the last survey and the lowest in a series which began in 1966. The gross loss of 36,863 acres is the largest loss recorded in a single season since beginning one year interval surveys in 2009. New plantings at 11,715 acres are up 16 percent from the previous season. Of the 25 published counties included in the survey, 21 recorded decreases in acreage, 4 showed increases. Polk County lost the most acreage, down 6,505 acres from last year, while Brevard County had the highest percentage net loss, with a 57 percent reduction in acreage. DeSoto County had the highest acreage gain with a 938 acre increase, followed by Charlotte, Hendry and Collier counties respectively. Polk remains the leader in acres with 69,950 acres. DeSoto remains a close second with 67,610 acres.

Orange acreage declined to 405,832, a decrease of 19,896 acres. Oranges represent 89 percent of all citrus acreage. The Western and Southern areas lead with approximately 128,000 orange acres each, while the Central area is now the third highest with nearly 123,000 acres. The remaining two areas, the Northern and Indian River, combined have 27,000 acres. Valencia acreage accounts for 56 percent of the total orange acreage, non-Valencia acreage represents 42 percent, and unidentified acreage is 2 percent.

Grapefruit acreage is now at 36,084, the lowest in the series. White grapefruit (including seedy) is 23 percent of the total with 8,218 acres, while red is 76 percent of the total with 27,360 acres. The Indian River District leads with 73 percent of the total grapefruit acreage.

Specialty fruit acreage is now at 13,057 acres, down 7 percent from the last survey. Tangelos now stand at 2,219 acres. Early tangerines with 3,034 acres account for 38 percent of the total tangerine acreage, Royal tangerines (formerly Temples) at 877 acres account for 11 percent of the total, while Honey tangerines with 3,973 acres make up the majority with 50 percent of the total tangerine acreage. The remaining citrus acreage in the specialty fruit category includes true lemons and other citrus acreage, with a total of 2,954 acres.

All Citrus Acreage, by Variety and Survey Year, and Changes Between Surveys – Florida: 1988-2017

Survey ¹ year	Oranges ²	Grapefruit	Specialty ² fruit	Total	Change ¹		Net change
					Gross loss	New plantings	
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
1988	536,737	119,606	41,586	697,929	52,240	125,677	+73,437
1990 ³	564,809	125,300	42,658	732,767	85,858	120,696	+34,838
1992	608,636	135,166	47,488	791,290	74,704	133,227	+58,523
1994	653,370	146,915	53,457	853,742	45,214	107,666	+62,452
1996	656,598	144,416	56,673	857,687	35,947	39,892	+3,945
1998	658,390	132,817	54,053	845,260	49,325	36,898	-12,427
2000	665,529	118,145	48,601	832,275	59,516	46,531	-12,985
2002	648,806	105,488	43,009	797,303	77,197	42,225	-34,972
2004	622,821	89,048	36,686	748,555	88,875	40,127	-48,748
2006 ⁴	529,241	63,419	28,713	621,373	150,805	23,623	-127,182
2008	496,518	56,881	23,178	576,577	66,924	22,128	-44,796
2009	492,529	53,863	22,422	568,814	19,918	12,155	-7,763
2010	483,418	50,189	20,430	554,037	25,109	10,332	-14,777
2011	473,086	48,990	19,252	541,328	21,769	9,060	-12,709
2012	464,918	48,191	18,384	531,493	19,383	9,548	-9,385
2013	459,311	47,656	17,673	524,640	15,115	8,262	-6,853
2014	452,364	45,922	16,861	515,147	21,041	11,548	-9,493
2015	441,628	43,962	15,806	501,396	26,094	12,343	-13,751
2016	425,728	40,316	14,077	480,121	31,365	10,090	-21,275
2017	405,832	36,084	13,057	454,973	36,863	11,715	-25,148

¹ One year survey beginning in 2009.

² Temples in specialty fruit through 2006 survey, then included in oranges through 2016 survey. Reclassified as Royal tangerines in 2017 survey.

³ December freeze in 1989.

⁴ August and September hurricanes in 2004. October hurricane in 2005.

All Citrus Acreage, by Variety and Year Set – Florida: Crop Year 2016-2017

Year set	All citrus	Oranges					Grapefruit		
		Early	Midseason	Late	Unidentified	Total	White Seedless	Red Seedless	Seedy
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Pre-1973.....	13,749	3,196	1,539	5,916	-	10,651	1,581	925	62
1973-1982.....	16,574	5,301	936	5,346	-	11,583	884	3,964	10
1983-1992.....	145,775	46,639	4,502	75,703	-	126,844	3,636	10,756	151
1993-1995.....	28,102	8,171	1,633	15,235	-	25,039	503	1,198	20
1996-1998.....	30,218	7,468	1,233	19,731	-	28,432	345	597	29
1999-2001.....	38,728	13,761	1,749	21,610	-	37,120	219	728	12
2002-2004.....	32,128	13,119	1,504	15,437	-	30,060	266	1,216	12
2005-2007.....	27,769	11,797	908	13,546	1	26,252	63	1,051	5
2008-2010.....	37,457	14,700	1,875	17,616	10	34,201	199	2,287	43
2011-2013.....	42,162	15,658	2,108	18,565	1,075	37,406	89	2,979	1
Bearing.....	412,662	139,810	17,987	208,705	1,086	367,588	7,785	25,701	345
2014.....	17,229	4,912	676	6,899	2,807	15,294	67	1,013	-
2015.....	13,367	3,826	433	5,571	2,089	11,919	5	541	-
2016.....	11,715	2,995	317	4,595	3,124	11,031	16	105	-
Non-bearing.....	42,311	11,733	1,426	17,065	8,020	38,244	88	1,659	-
Total.....	454,973	151,543	19,413	225,770	9,106	405,832	7,873	27,360	345

See footnote(s) at end of table.

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All Citrus Trees, by Variety and Year Set – Florida: Crop Year 2016-2017

Year set	All citrus	Oranges					Grapefruit		
		Early	Midseason	Late	Unidentified	Total	White Seedless	Red Seedless	Seedy
(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)
Pre-1973.....	1,481.0	357.8	180.2	670.9	-	1,208.9	124.1	83.9	6.0
1973-1982.....	1,863.3	619.2	120.0	645.2	-	1,384.4	85.8	377.2	1.0
1983-1992.....	20,427.3	6,442.2	616.4	11,008.7	-	18,067.3	417.8	1,263.9	14.9
1993-1995.....	4,011.4	1,114.1	251.4	2,208.0	-	3,573.5	51.0	163.3	1.8
1996-1998.....	4,110.8	986.0	165.4	2,724.9	-	3,876.3	34.7	72.4	2.9
1999-2001.....	5,045.7	1,792.0	236.2	2,824.3	-	4,852.5	21.2	81.4	1.1
2002-2004.....	4,091.0	1,672.3	197.2	1,980.8	-	3,850.3	29.0	140.5	1.2
2005-2007.....	3,518.2	1,475.6	115.5	1,727.1	0.1	3,318.3	6.4	130.2	0.5
2008-2010.....	5,008.0	1,985.5	249.4	2,381.4	1.0	4,617.3	21.0	259.0	4.2
2011-2013.....	6,025.6	2,278.9	307.2	2,595.4	152.3	5,333.8	9.5	390.1	0.1
Bearing.....	55,582.3	18,723.6	2,438.9	28,766.7	153.4	50,082.6	800.5	2,961.9	33.7
2014.....	2,665.4	777.0	90.3	1,068.5	422.5	2,358.3	5.9	139.7	-
2015.....	2,050.2	548.2	60.5	861.9	299.9	1,770.5	0.6	69.0	-
2016.....	1,919.4	489.3	45.3	771.6	504.7	1,810.9	1.4	12.5	-
Non-bearing.....	6,635.0	1,814.5	196.1	2,702.0	1,227.1	5,939.7	7.9	221.2	-
Total.....	62,217.3	20,538.1	2,635.0	31,468.7	1,380.5	56,022.3	808.4	3,183.1	33.7

See footnote(s) at end of table.

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All Citrus Acreage, by Variety and Year Set – Florida: Crop Year 2016-2017 (continued)

Year set	Grapefruit		Tangerines						Tangelos	Other Citrus
	Unidentified	Total	Fallglo	Sunburst	Early ¹	Royal	Honey	Total		
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Pre-1973.....	-	2,568	-	-	-	318	91	409	116	5
1973-1982.....	-	4,858	-	11	11	24	77	112	20	1
1983-1992.....	-	14,543	333	1,172	1,505	343	1,345	3,193	942	253
1993-1995.....	-	1,721	247	209	456	38	555	1,049	168	125
1996-1998.....	-	971	75	85	160	39	440	639	87	89
1999-2001.....	-	959	31	54	85	41	300	426	113	110
2002-2004.....	-	1,494	6	45	51	46	183	280	244	50
2005-2007.....	-	1,119	39	58	97	11	172	280	71	47
2008-2010.....	-	2,529	50	75	125	5	172	302	136	289
2011-2013.....	15	3,084	122	193	315	10	316	641	198	833
Bearing	15	33,846	903	1,902	2,805	875	3,651	7,331	2,095	1,802
2014.....	205	1,285	18	32	50	2	116	168	54	428
2015.....	204	750	30	65	95	-	86	181	53	464
2016.....	82	203	40	44	84	-	120	204	17	260
Non-bearing	491	2,238	88	141	229	2	322	553	124	1,152
Total	506	36,084	991	2,043	3,034	877	3,973	7,884	2,219	2,954

- Represents zero.

¹ Fallglo and Sunburst varieties.

All Citrus Trees, by Variety and Year Set – Florida: Crop Year 2016-2017 (continued)

Year set	Grapefruit		Tangerines						Tangelos	Other Citrus
	Unidentified	Total	Fallglo	Sunburst	Early ¹	Royal	Honey	Total		
	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)
Pre-1973.....	-	214.0	-	-	-	34.9	10.6	45.5	12.0	0.6
1973-1982.....	-	464.0	-	1.6	1.6	2.3	8.6	12.5	2.3	0.1
1983-1992.....	-	1,696.6	53.6	184.8	238.4	44.0	218.4	500.8	129.5	33.1
1993-1995.....	-	216.1	40.9	35.3	76.2	5.4	99.1	180.7	21.2	19.9
1996-1998.....	-	110.0	12.8	13.8	26.6	4.7	69.4	100.7	11.9	11.9
1999-2001.....	-	103.7	5.2	7.1	12.3	5.7	41.4	59.4	15.0	15.1
2002-2004.....	-	170.7	1.1	6.6	7.7	5.1	21.7	34.5	29.0	6.5
2005-2007.....	-	137.1	5.7	8.4	14.1	1.5	29.5	45.1	10.0	7.7
2008-2010.....	-	284.2	7.4	10.1	17.5	0.5	24.1	42.1	15.8	48.6
2011-2013.....	1.7	401.4	17.6	27.5	45.1	1.1	47.7	93.9	32.3	164.2
Bearing	1.7	3,797.8	144.3	295.2	439.5	105.2	570.5	1,115.2	279.0	307.7
2014.....	41.8	187.4	3.1	5.4	8.5	0.2	15.1	23.8	6.1	89.8
2015.....	35.3	104.9	6.8	9.4	16.2	-	12.3	28.5	8.0	138.3
2016.....	12.6	26.5	7.3	6.9	14.2	-	18.8	33.0	2.2	46.8
Non-bearing	89.7	318.8	17.2	21.7	38.9	0.2	46.2	85.3	16.3	274.9
Total	91.4	4,116.6	161.5	316.9	478.4	105.4	616.7	1,200.5	295.3	582.6

- Represents zero.

¹ Fallglo and Sunburst varieties.

All Citrus Acreage and Trees, by County and Year of Inventory – Florida: 2014-2017

County	2014	2015	2016	2017	2014	2015	2016	2017
	(acres)	(acres)	(acres)	(acres)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)
Brevard.....	2,990	2,100	2,055	890	357.5	261.9	257.2	118.7
Charlotte.....	13,273	13,492	13,655	14,538	1,896.7	1,928.9	1,963.6	2,179.7
Collier.....	30,099	29,893	29,253	29,310	4,420.5	4,393.4	4,317.2	4,330.2
DeSoto.....	66,104	66,302	66,672	67,610	8,864.9	8,921.9	8,973.3	9,188.8
Glades.....	8,009	7,118	6,163	6,073	1,220.9	1,103.4	877.2	862.9
Hardee.....	47,069	47,121	44,476	42,813	5,847.5	5,954.3	5,692.5	5,551.9
Hendry.....	63,355	64,063	64,575	64,834	9,530.9	9,680.0	9,955.2	10,057.1
Hernando.....	832	766	693	489	98.3	92.5	84.8	60.4
Highlands.....	60,391	58,287	57,921	54,244	7,888.6	7,671.9	7,651.8	7,258.0
Hillsborough.....	6,535	5,902	3,963	3,653	778.8	739.7	514.6	476.6
Indian River.....	31,606	29,500	26,218	23,761	3,514.8	3,294.8	3,060.5	2,784.9
Lake.....	10,141	9,719	8,766	7,342	1,463.6	1,399.8	1,264.4	1,073.4
Lee.....	10,498	10,571	10,267	10,263	1,430.1	1,440.4	1,398.8	1,397.3
Manatee.....	17,565	16,974	16,231	15,666	2,276.0	2,208.7	2,110.7	2,029.8
Marion.....	1,100	1,063	1,047	1,043	132.2	128.0	125.0	125.0
Martin.....	4,366	3,219	2,530	2,126	710.5	555.5	447.0	385.0
Okeechobee.....	6,358	6,253	6,000	4,320	758.2	749.4	750.8	565.7
Orange.....	2,958	2,315	1,993	1,300	359.2	282.8	248.1	170.0
Osceola.....	8,858	8,502	8,172	8,089	1,102.9	1,066.2	1,033.0	1,023.6
Pasco.....	5,912	5,529	3,722	1,928	834.5	788.8	531.3	279.2
Polk.....	81,810	80,488	76,455	69,950	9,997.4	9,915.1	9,544.7	8,951.1
Putnam.....	167	^{1/}	^{1/}	^{1/}	24.6	^{1/}	^{1/}	^{1/}
St. Lucie.....	32,378	29,559	26,744	22,355	4,302.0	3,973.8	3,615.6	3,057.2
Sarasota.....	1,263	1,197	1,173	1,134	145.2	142.5	143.1	139.4
Seminole.....	378	362	354	319	47.1	44.7	44.1	41.5
Volusia.....	765	785	784	703	83.8	85.9	86.9	81.1
Other Counties ²	367	316	239	220	47.6	42.8	31.6	28.8
Total.....	515,147	501,396	480,121	454,973	68,134.3	66,867.1	64,723.0	62,217.3

¹ Included in other counties beginning in 2015.

² Includes Citrus, Palm Beach, and Pinellas in 2014; includes Citrus and Putnam in 2015 and 2016; includes Alachua, Citrus and Putnam in 2017.

All Citrus Acreage and Trees, by Variety and Year of Inventory – Florida: 2014-2017

Variety	2014	2015	2016	2017	2014	2015	2016	2017
	(acres)	(acres)	(acres)	(acres)	(1,000 trees)	(1,000 trees)	(1,000 trees)	(1,000 trees)
Oranges:								
Hamlin.....	150,040	146,010	141,004	134,779	19,714.7	19,338.4	18,825.0	18,271.2
Parson Brown.....	8,370	7,402	6,875	5,783	1,114.1	996.8	923.0	778.5
Navel.....	8,236	8,115	8,295	7,758	1,058.8	1,053.0	1,096.2	1,057.6
Ambersweet.....	989	844	608	361	135.4	116.1	82.0	48.9
Other early.....	3,313	3,270	2,961	2,862	431.6	427.4	389.4	381.9
Pineapple.....	18,072	16,500	14,695	13,515	2,318.9	2,126.7	1,928.9	1,793.4
Other mids.....	6,868	6,410	6,324	5,898	961.2	905.3	895.7	841.6
Temples.....	1,355	1,212	1,115	(X)	160.6	141.0	131.3	(X)
Non-Valencia.....	197,243	189,763	181,877	170,956	25,895.3	25,104.7	24,271.5	23,173.1
Valencia.....	247,077	241,036	232,285	225,770	33,554.1	32,936.8	31,917.3	31,468.7
Unidentified.....	8,044	10,829	11,566	9,106	1,096.1	1,529.7	1,763.3	1,380.5
Total Oranges.....	452,364	441,628	425,728	405,832	60,545.5	59,571.2	57,952.1	56,022.3
Grapefruit:								
Seedy.....	500	464	436	345	46.5	43.5	41.7	33.7
White seedless.....	11,960	11,051	9,206	7,873	1,232.6	1,135.4	946.9	808.4
Red seedless.....	32,614	31,568	30,224	27,360	3,724.6	3,625.2	3,523.7	3,183.1
Unidentified.....	848	879	450	506	114.3	129.0	69.7	91.4
Total Grapefruit.....	45,922	43,962	40,316	36,084	5,118.0	4,933.1	4,582.0	4,116.6
Specialty:								
Tangelos:								
Orlando Tangelos.....	2,061	1,717	1,264	825	272.4	233.7	178.0	119.3
Minneola Tangelos.....	1,451	1,298	1,237	1,296	179.0	158.6	154.1	160.9
Other Tangelos.....	186	154	122	98	27.2	22.4	18.7	15.1
Total Tangelos.....	3,698	3,169	2,623	2,219	478.6	414.7	350.8	295.3
Tangerines:								
Fallglo Tangerines.....	1,306	1,283	1,174	991	206.7	203.7	189.5	161.5
Sunburst Tangerines.....	4,613	4,233	3,288	2,043	687.5	640.0	496.5	316.9
Early Tangerines.....	5,919	5,516	4,462	3,034	894.2	843.7	686.0	478.4
Royal.....	(X)	(X)	(X)	877	(X)	(X)	(X)	105.4
Honey Tangerines.....	5,491	5,111	4,337	3,973	825.2	772.5	671.4	616.7
Total Tangerines.....	11,410	10,627	8,799	7,884	1,719.4	1,616.2	1,357.4	1,200.5
True Lemons.....	98	97	95	125	13.3	13.2	12.7	15.9
Other Citrus ¹	1,655	1,913	2,560	2,829	259.5	318.7	468.0	566.7
Total Specialty.....	16,861	15,806	14,077	13,057	2,470.8	2,362.8	2,188.9	2,078.4
Total Citrus.....	515,147	501,396	480,121	454,973	68,134.3	66,867.1	64,723.0	62,217.3

X Not applicable.

¹ Includes Meyer lemons and Robinson and Dancy tangerines.

All Citrus Acreage, by Production Area and Year of Inventory – Florida: 2016-2017

Production Area	Oranges		Grapefruit		Specialty		Total	
	2016	2017	2016	2017	2016	2017	2016	2017
	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)
Indian River	20,222	16,022	29,518	26,396	2,638	2,582	52,378	45,000
Northern	14,618	10,915	695	588	2,004	1,625	17,317	13,128
Central	131,934	122,917	3,669	3,044	4,962	4,353	140,565	130,314
Western.....	129,661	128,169	1,208	1,132	1,646	1,575	132,515	130,876
Southern	129,293	127,809	5,226	4,924	2,827	2,922	137,346	135,655
Total	425,728	405,832	40,316	36,084	14,077	13,057	480,121	454,973

Citrus Inventory Procedures

This inventory is the ninth annual survey following a biennial series which began in January 1966. Following the 2008 survey, the work was divided between two years with part of each county being visited each year. Florida uses the Public Land Survey System with the units of townships and sections to describe land. Each township contains 36 sections, each one square mile in size. The township is divided into four quadrants of nine square miles each. In each survey period, one-half of the quadrants will be inspected. Quadrants with citrus groves in the northern half of each township will be visited in the odd years and those with citrus groves in the southern half are visited in even years.

In 2005, all mapped records were transferred to a geographical information system (GIS) for use with digital imagery. Newer high resolution imagery is provided by the Florida Department of Transportation, as it becomes available. Changes are now detected by comparing digital imagery taken at different times. Each change observed by the photo interpreter is followed by a ground check which usually results in a revised tree count for the grove. Acreages can be verified using the GIS. Tree numbers are from actual tree counts or from measured acreage. Block sizes are reduced as necessary for 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 of plantings which no longer exist are transferred to an inactive layer. For this inventory period, 56 percent of the state's total citrus acreage was visited to update the records.

Production areas were redesigned in 1986 to give greater efficiency for objective forecasting purposes. The principal change was to place all the northern freeze-prone regions in a single area and to set apart the southern flatwoods plantings. The Indian River District follows the boundary of the Indian River Marketing District. This stratification provides greater homogeneity within each sampling stratum.

