



CITRUS COMMERCIAL CITRUS INVENTORY PRELIMINARY REPORT

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ALL CITRUS ACREAGE DECLINED TO 568,814

Results of the first annual commercial citrus inventory show a net change of -7,763 acres, or -1.3 percent, in the 1 year period, considerably less than in recent 2 year survey periods. The elimination and removal of infected trees due to citrus canker and greening diseases contributed to the gross loss of 19,918 acres. New plantings of 12,155 acres are above the annual averages of the 2006 and 2008 surveys and partially offset the gross loss.

Of the 30 counties included in the survey, 17 recorded decreases and 13 showed increases in acreage. Martin County suffered the greatest loss in acreage at 4,170, while Brevard County lost the highest percentage at 18.6. Hardee and Polk had the largest gains and Polk continues to lead with the most acres at 82,629. Hendry is second with 66,821 acres while Highlands and DeSoto follow with over 62,000 acres each. For total trees, Hendry remains the leader with 10.0 million, followed by Polk with 9.8 million, DeSoto with 8.3 million, and Highlands with 8.0 million trees.

ALL ORANGE ACREAGE DROPPED TO 492,529

All orange acreage declined for the fifth consecutive survey and, at 492,529, is the lowest since the 1986 census, when a record low of 466,252 remained following several major freezes. Although the Southern area's acreage decreased from 2008, it still leads with 29.8 percent of all acres. Acreage increases were recorded in the Central area, now at 28.7 percent and Western area at 27.6 percent.

The relationship between bearing and non-bearing trees is nearly the same as in 2008 with over 93 percent bearing. Young Valencia trees comprise 40 percent of the non-bearing category while the non-bearing Temple trees total only 800. All Valencia trees comprise 55 percent of the total orange trees; early-midseason-Navel-Temples account for 43 percent; and the unidentified (primarily non-bearing) trees make up the remainder.

GRAPEFRUIT ACREAGE DECREASED TO 53,863

Grapefruit acreage has fallen 5.3 percent to a new low of 53,863 which represents only 60 percent of the pre-hurricanes figure. The white seedless variety has lost almost 10 percent of its acreage and 11 percent of the trees since the previous survey. The Indian River District, although devastated by losses caused by the canker and greening diseases, has the highest inventory with 74.4 percent, or 40,059 acres, of the State total.

Colored seedless acres total 36,974 and white acres are at 15,966. Only 573 acres of seedy grapefruit remain. Due to the limited availability of resets over the past 3 years, only 3.6 percent of the total grapefruit trees are listed in the non-bearing category.

SPECIALTY ACREAGE REDUCED TO 22,422

Specialty fruit acreage has continued to decline across the state and now stands at 22,422, slightly more than one-fifth of the record 101,615 acres in 1970. Temples are included with oranges since 2008. Tangelo acreage and tree losses have slowed to 2 percent in the past year while tangerine losses are at 3 percent. Honey tangerines account for 49 percent of the total tangerine category with 7,319 acres. Despite losses, Sunburst remain at 80 percent of the early tangerine total with 6,118 acres. Fallglo acreage at 1,559 is only two-thirds of the 2004 total. True lemon acreage has decreased by 23 percent since 2008.

FLORIDA COMMERCIAL CITRUS: Acreage

Census year	Oranges	Grapefruit	Specialty fruit	Total
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
1994	653,370	146,915	53,457	853,742
1996	656,598	144,416	56,673	857,687
1998	658,390	132,817	54,053	845,260
2000	665,529	118,145	48,601	832,275
2002	648,806	105,488	43,009	797,303
2004	622,821	89,048	36,686	748,555
2006	529,241	63,419	28,713	621,373
2008	496,518	56,881	23,178	576,577
2009	492,529	53,863	22,422	568,814

FLORIDA COMMERCIAL CITRUS: Acreage changes since previous census

Census year	Two year change		Net change	Total
	Gross loss	New plantings		
1970	26,114	36,336	+10,222	941,471
1972 ^{1/}	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 ^{1/}	49,127	27,993	-21,134	831,235
1980	25,925	39,973	+14,048	845,283
1982 ^{1/}	51,942	54,515	+2,573	847,856
1984 ^{1/}	159,719	73,228	-86,491	761,365
1986 ^{1/}	185,598	48,725	-136,873	624,492
1988	52,240	125,677	+73,437	697,929
1990 ^{1/}	85,858	120,696	+34,838	732,767
1992	74,704	133,227	+58,523	791,290
1994	45,214	107,666	+62,452	853,742
1996	35,947	39,892	+3,945	857,687
1998	49,325	36,898	-12,427	845,260
2000	59,541	46,531	-12,985	832,250
2002	77,197	42,225	-34,972	797,303
2004 ^{2/}	88,875	40,127	-48,748	748,555
2006 ^{2/}	150,805	23,623	-127,182	621,373
2008	66,924	22,128	-44,796	576,577
2009	19,918	12,155	-7,763	568,814

^{1/} January freezes in 1971, 1977, 1981, 1982, 1985, and 1986.

December freezes in 1983, 1985, and 1989.

^{2/} August and September hurricanes in 2004, October hurricane in 2005.

ALL CITRUS: Number of acres, by variety and year set

Year set	All citrus	Oranges						Tangelos	Other citrus
		Early	Midseason	Temples	Late	Uniden- tified	Total		
	<i>Acres</i>								
Pre-1965	24,207	6,571	3,577	489	11,421	0	22,058	463	53
1965-1974	23,354	4,374	2,576	372	7,220	0	14,542	391	50
1975-1984	49,479	19,454	2,743	87	17,723	0	40,007	183	64
1985-1987	55,749	22,705	2,230	190	25,681	0	50,806	507	143
1988-1990	102,288	30,727	3,518	237	51,057	0	85,539	1,222	451
1991-1993	95,491	28,068	5,056	121	46,355	0	79,600	1,202	533
1994-1996	34,877	10,207	1,837	116	18,384	0	30,544	293	343
1997-1999	52,907	13,995	2,954	79	32,292	3	49,323	291	190
2000-2002	51,300	18,336	3,423	77	25,553	10	47,399	348	165
2003-2005	43,503	18,009	2,384	48	18,409	560	39,410	283	110
Bearing	533,155	172,446	30,298	1,816	254,095	573	459,228	5,183	2,102
2006	13,196	4,421	755	4	5,014	2,027	12,221	35	61
2007	10,308	3,578	420	2	3,562	1,946	9,508	12	13
2008	12,155	3,507	488	0	4,441	3,136	11,572	7	13
Non-bearing	35,659	11,506	1,663	6	13,017	7,109	33,301	54	87
Total	568,814	183,952	31,961	1,822	267,112	7,682	492,529	5,237	2,189

Continued

ALL CITRUS: Number of trees, by variety and year set

Year set	All citrus	Oranges						Tangelos	Other citrus
		Early	Midseason	Temples	Late	Uniden- tified	Total		
	<i>1,000 trees</i>								
Pre-1965	2,361.5	632.5	364.2	49.1	1,131.9	0.0	2,177.7	38.8	5.2
1965-1974	2,453.0	490.9	299.2	41.0	830.7	0.0	1,661.8	40.1	5.8
1975-1984	5,652.3	2,254.6	334.6	9.4	2,080.0	0.0	4,678.6	19.8	7.5
1985-1987	7,353.5	2,955.6	284.1	23.5	3,486.0	0.0	6,749.2	63.7	18.6
1988-1990	14,567.2	4,358.8	490.5	29.6	7,570.1	0.0	12,449.0	171.2	70.0
1991-1993	13,384.4	3,832.7	709.3	15.0	6,710.4	0.1	11,267.5	160.4	79.1
1994-1996	4,906.4	1,360.4	252.0	14.8	2,674.9	0.0	4,302.1	46.0	67.8
1997-1999	6,962.5	1,832.8	391.0	10.4	4,262.0	0.3	6,496.5	37.5	29.1
2000-2002	6,522.4	2,306.6	466.9	9.3	3,277.7	1.2	6,061.7	43.5	21.8
2003-2005	5,402.5	2,222.3	294.3	5.7	2,320.1	66.4	4,908.8	37.4	15.8
Bearing	69,565.7	22,247.2	3,886.1	207.8	34,343.8	68.0	60,752.9	658.4	320.7
2006	1,646.3	550.4	99.6	0.6	629.8	241.5	1,521.9	4.7	6.9
2007	1,292.3	455.0	53.4	0.2	457.0	227.6	1,193.2	1.8	1.4
2008	1,586.2	444.9	58.8	0.0	614.4	406.6	1,524.7	0.8	1.5
Non-bearing	4,524.8	1,450.3	211.8	0.8	1,701.2	875.7	4,239.8	7.3	9.8
Total	74,090.5	23,697.5	4,097.9	208.6	36,045.0	943.7	64,992.7	665.7	330.5

Continued

ALL CITRUS: Number of acres, by variety and year set

Year set	Grapefruit					Tangerines				
	White seedless	Colored seedless	Seedy	Unidentified	Total	Fallglo	Sunburst	Early ^{1/}	Honey	Total
	<i>Acres</i>									
Pre-1965	892	325	136	0	1,353	0	0	0	280	280
1965-1974	3,992	4,003	96	0	8,091	0	0	0	280	280
1975-1984	1,059	7,472	45	0	8,576	0	216	216	433	649
1985-1987	454	2,669	103	0	3,226	10	567	577	490	1,067
1988-1990	4,312	7,214	62	0	11,588	391	1,920	2,311	1,177	3,488
1991-1993	1,947	7,163	69	0	9,179	772	2,463	3,235	1,742	4,977
1994-1996	1,040	1,245	9	0	2,294	145	298	443	960	1,403
1997-1999	783	1,096	20	0	1,899	103	260	363	841	1,204
2000-2002	824	1,707	23	0	2,554	79	148	227	607	834
2003-2005	500	2,649	5	20	3,174	29	180	209	317	526
Bearing	15,803	35,543	568	20	51,934	1,529	6,052	7,581	7,127	14,708
2006	49	556	4	109	718	12	28	40	121	161
2007	37	573	1	72	683	16	33	49	43	92
2008	77	302	0	149	528	2	5	7	28	35
Non-bearing	163	1,431	5	330	1,929	30	66	96	192	288
Total	15,966	36,974	573	350	53,863	1,559	6,118	7,677	7,319	14,996

^{1/} Fallglo and Sunburst varieties.

ALL CITRUS: Number of trees, by variety and year set

Year set	Grapefruit					Tangerines				
	White seedless	Colored seedless	Seedy	Unidentified	Total	Fallglo	Sunburst	Early ^{1/}	Honey	Total
	<i>1,000 trees</i>									
Pre-1965	70.9	25.2	12.3	0.0	108.4	0.0	0.0	0.0	31.4	31.4
1965-1974	343.0	362.1	9.1	0.0	714.2	0.0	0.0	0.0	31.1	31.1
1975-1984	104.1	754.8	4.3	0.0	863.2	0.0	26.6	26.6	56.6	83.2
1985-1987	48.7	308.4	9.8	0.0	366.9	2.7	77.0	79.7	75.4	155.1
1988-1990	492.1	835.0	5.5	0.0	1,332.6	63.2	292.3	355.5	188.9	544.4
1991-1993	218.9	889.2	6.7	0.0	1,114.8	119.2	362.4	481.6	281.0	762.6
1994-1996	118.3	146.4	0.7	0.0	265.4	23.6	47.2	70.8	154.3	225.1
1997-1999	82.5	130.2	1.8	0.0	214.5	15.1	36.7	51.8	133.1	184.9
2000-2002	86.5	194.0	2.0	0.0	282.5	11.3	19.3	30.6	82.3	112.9
2003-2005	55.0	313.3	0.4	2.6	371.3	4.0	24.9	28.9	40.3	69.2
Bearing	1,620.0	3,958.6	52.6	2.6	5,633.8	239.1	886.4	1,125.5	1,074.4	2,199.9
2006	5.5	72.9	0.3	10.7	89.4	1.9	3.8	5.7	17.7	23.4
2007	3.6	72.0	0.0	7.4	83.0	2.2	4.3	6.5	6.4	12.9
2008	8.5	33.0	0.0	13.3	54.8	0.3	0.7	1.0	3.4	4.4
Non-bearing	17.6	177.9	0.3	31.4	227.2	4.4	8.8	13.2	27.5	40.7
Total	1,637.6	4,136.5	52.9	34.0	5,861.0	243.5	895.2	1,138.7	1,101.9	2,240.6

^{1/} Fallglo and Sunburst varieties.

ALL CITRUS: Acreage and tree numbers, by county and year of inventory ^{1/}

County	2004	2006	2008	2009	2004	2006	2008	2009
	<i>Acres</i>				<i>1,000 trees</i>			
Brevard	6,249	5,080	4,451	3,622	664.0	553.5	477.5	410.4
Charlotte	20,183	11,883	11,991	12,098	2,998.9	1,708.6	1,710.5	1,716.1
Citrus	146	145	138	139	17.1	16.9	15.5	15.7
Collier	34,878	33,394	31,596	31,247	5,101.1	4,881.7	4,634.0	4,579.5
DeSoto	68,559	61,083	61,426	62,304	9,080.1	8,181.7	8,239.5	8,304.5
Glades	10,103	8,555	9,052	9,090	1,640.9	1,390.0	1,392.8	1,389.7
Hardee	54,414	45,084	45,190	47,130	6,462.6	5,511.5	5,463.5	5,714.6
Hendry	93,155	79,726	69,927	66,821	14,298.1	12,280.5	10,576.8	10,038.6
Hernando	971	921	895	917	113.0	106.6	101.9	104.2
Highlands	74,623	62,671	62,599	62,443	9,962.1	8,252.9	8,025.6	8,018.5
Hillsborough	19,187	14,783	11,248	10,946	2,131.1	1,628.9	1,259.0	1,236.8
Indian River	47,539	40,191	39,013	38,377	5,322.3	4,504.3	4,344.1	4,204.0
Lake	17,486	15,198	13,100	12,884	2,415.2	2,122.5	1,829.2	1,797.3
Lee	11,067	10,658	10,373	10,477	1,549.2	1,489.3	1,417.1	1,433.1
Manatee	20,316	18,548	18,389	18,609	2,590.5	2,431.0	2,391.9	2,413.8
Marion	1,212	1,185	1,180	1,183	149.6	146.1	143.8	144.1
Martin	40,330	35,038	23,169	18,999	5,732.2	5,024.3	3,388.1	2,769.7
Okeechobee	11,891	9,222	8,327	7,930	1,460.9	1,056.9	940.1	901.2
Orange	5,593	4,548	3,674	3,618	666.4	549.4	437.8	433.4
Osceola	13,804	12,170	9,197	9,718	1,594.1	1,411.0	1,082.2	1,154.7
Palm Beach	4,542	1,668	997	1,013	699.8	256.4	170.6	164.5
Pasco	9,831	8,190	7,957	7,615	1,323.7	1,140.9	1,113.6	1,063.9
Polk	95,050	86,398	81,375	82,629	11,147.1	10,222.5	9,699.1	9,841.8
Putnam	205	182	190	203	33.8	30.5	29.5	30.5
St. Lucie	82,987	51,387	48,073	45,800	10,342.0	6,637.6	6,151.0	5,883.7
Sarasota	1,684	1,652	1,502	1,411	190.5	187.7	170.5	159.3
Seminole	1,147	529	491	482	122.5	59.6	56.9	55.4
Volusia	1,344	1,231	1,083	1,065	130.4	120.9	108.7	106.5
Other Counties ^{2/}	59	53	55	44	5.8	5.3	5.3	5.0
TOTAL	748,555	621,373	576,577	568,814	97,945.0	81,909.0	75,376.1	74,090.5

^{1/} Miami-Dade excluded beginning in 2004; Broward excluded beginning 2006.

^{2/} Includes Alachua, Broward, and Pinellas in 2004 and 2006; Alachua and Pinellas in 2008 and 2009.

ALL CITRUS: Acreage and tree numbers, by variety and year of inventory

Variety	2004	2006	2008	2009	2004	2006	2008	2009
	<i>Acres</i>				<i>1,000 trees</i>			
ORANGES:								
Hamlin	200,944	169,216	158,618	157,558	26,037.0	22,082.1	20,477.3	20,227.1
Navel	16,340	12,211	10,443	9,802	2,094.0	1,568.6	1,331.5	1,248.3
Ambersweet	3,355	2,194	1,447	1,397	460.2	302.1	193.9	188.5
Other early	19,569	16,549	15,630	15,195	2,588.2	2,226.2	2,092.1	2,033.6
Pineapple	41,521	31,124	26,640	25,258	5,197.3	3,950.7	3,366.5	3,166.0
Other mids	8,077	6,477	6,619	6,703	1,134.8	895.0	916.6	931.9
Temples ^{1/}	—	—	2,140	1,822	—	—	243.0	208.6
Early-midseason-Navel	289,806	237,771	221,537	217,735	37,511.5	31,024.7	28,620.9	28,004.0
Late	321,991	285,769	269,991	267,112	44,076.4	39,126.0	36,562.8	36,045.0
Unidentified	11,024	5,701	4,990	7,682	1,390.6	698.7	591.6	943.7
TOTAL ORANGES	622,821	529,241	496,518	492,529	82,978.5	70,849.4	65,775.3	64,992.7
GRAPEFRUIT:								
Seedy	1,236	833	670	573	115.2	80.5	62.6	52.9
White seedless	32,199	20,927	17,711	15,966	3,368.0	2,189.1	1,843.0	1,637.6
Colored seedless	54,619	41,232	38,125	36,974	6,147.2	4,648.8	4,291.3	4,136.5
Unidentified	994	427	375	350	117.9	53.0	44.1	34.0
TOTAL GRAPEFRUIT	89,048	63,419	56,881	53,863	9,748.3	6,971.4	6,241.0	5,861.0
SPECIALTY:								
TANGELOS:								
Orlando Tangelos	4,908	3,757	3,014	2,977	625.7	484.4	387.8	383.9
Minneola Tangelos	2,896	2,103	2,030	1,975	355.3	255.9	247.3	240.3
Other Tangelos	855	681	301	285	148.6	119.0	44.1	41.5
TOTAL TANGELOS	8,659	6,541	5,345	5,237	1,129.6	859.3	679.2	665.7
TANGERINES:								
Fallglo Tangerines	2,370	1,765	1,582	1,559	366.9	268.4	246.8	243.5
Sunburst Tangerines	9,305	7,148	6,268	6,118	1,398.6	1,058.1	917.8	895.2
Early Tangerines	11,675	8,913	7,850	7,677	1,765.5	1,326.5	1,164.6	1,138.7
Honey Tangerines	9,635	8,333	7,585	7,319	1,460.2	1,268.6	1,153.4	1,101.9
TOTAL TANGERINES	21,310	17,246	15,435	14,996	3,225.7	2,595.1	2,318.0	2,240.6
Temples ^{1/}	3,578	2,542	—	—	413.0	293.3	—	—
True Lemons	759	603	602	461	130.6	105.3	104.5	82.2
Meyer Lemons ^{2/}	66	—	—	—	13.1	—	—	—
Other Citrus ^{2/}	2,314	1,781	1,796	1,728	306.2	235.2	258.1	248.3
TOTAL SPECIALTY	36,686	28,713	23,178	22,422	5,218.2	4,088.2	3,359.8	3,236.8
TOTAL CITRUS	748,555	621,373	576,577	568,814	97,945.0	81,909.0	75,376.1	74,090.5

^{1/}Beginning with the 2008 Commercial Citrus Inventory, Temples are included in oranges. Previously, Temples were listed under Specialty.

^{2/}Beginning with the 2004 Commercial Citrus Inventory, Robinson and Dancy tangerines are included in Other Citrus. Beginning with the 2006 Commercial Citrus Inventory, Meyer Lemons are included in Other Citrus.

ALL CITRUS: Number of acres, by area and year of inventory

Area	Oranges		Grapefruit		Specialty types		Total	
	2008	2009	2008	2009	2008	2009	2008	2009
	<i>Acres</i>							
Indian River	50,007	45,826	42,145	40,059	3,704	3,482	95,856	89,367
Northern	23,233	22,728	1,076	1,057	3,883	3,799	28,192	27,584
Central	139,768	141,172	4,741	4,798	7,144	7,042	151,653	153,012
Western	133,293	135,989	1,667	1,713	2,749	2,729	137,709	140,431
Southern	150,217	146,814	7,252	6,236	5,698	5,370	163,167	158,420
TOTAL	496,518	492,529	56,881	53,863	23,178	22,422	576,577	568,814

CITRUS INVENTORY PROCEDURES

This inventory is the first annual survey following a biennial series which began in January 1966. Following the 2008 survey, the work was divided between 2 years with part of each county being visited each year. Florida uses the Public Land Survey System with the units of township and section to describe land. Each township contains 36 sections, each 1 square mile in size. The township is divided into quadrants of 9 square miles. In each survey period, one-half of the quadrants will be inspected. Citrus groves in the northern half of each township will be visited in the odd years and those in the southern half visited in even years.

In 2005, all mapped records were transferred to a geographical information system, (GIS) for use with digital imagery. Base maps are 2004 Digital Ortho Quarter Quads with newer high resolution imagery provided by the Florida Resources and Environmental Analysis Center, as they become available. Changes are now detected by comparing digital imagery taken at different times. 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. Acreages can be verified using the GIS. Tree numbers are from actual tree counts or interpolations 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. Typically, in non-freeze years, less than one-third of all blocks require a visit to complete the biennial census. For this census period, 127,506 blocks were visited to update the records. Additionally, data was collected on abandoned citrus acreage during the survey.

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.

In combination with the citrus inventory, abandoned citrus groves were also identified and their locations mapped. During the major portion of the survey, the Division of Plant Industry provided experienced agricultural personnel to assist the Florida Field Office's tree inventory team to evaluate tree condition and make an overall assessment of each citrus grove.

