



# CITRUS FEBRUARY FORECAST

## MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture & Consumer Services  
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February 10, 2014

**Florida All Orange Production Unchanged**  
**Florida Non-Valencia Orange Production Unchanged**  
**Florida Valencia Orange Production Unchanged**  
**Florida All Grapefruit Production Up 3 Percent**  
**Florida All Tangerine Production Up 3 Percent**  
**Florida Tangelo Production Down 20 Percent**  
**FCOJ Yield 1.61 Gallons per Box (42° Brix)**

FORECAST DATES	–	2013-2014 SEASON
March 10, 2014		April 9, 2014
May 9, 2014		June 11, 2014
		July 11, 2014

### Citrus Production by Type and State – United States

Crop and State	Production <sup>1</sup>			2013-2014 Forecasted Production <sup>1</sup>	
	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)	2012-2013 (1,000 boxes)	January (1,000 boxes)	February (1,000 boxes)
<b>Non-Valencia Oranges<sup>2</sup></b>					
Florida.....	70,300	74,200	67,100	54,000	54,000
California <sup>3</sup> .....	48,000	45,500	44,000	42,000	42,000
Texas <sup>3</sup> .....	1,700	1,108	1,499	1,455	1,455
United States.....	120,000	120,808	112,599	97,455	97,455
<b>Valencia Oranges</b>					
Florida.....	70,200	72,500	66,500	61,000	61,000
California <sup>3</sup> .....	14,500	12,500	12,500	11,500	11,500
Texas <sup>3</sup> .....	249	311	289	370	370
United States.....	84,949	85,311	79,289	72,870	72,870
<b>All Oranges</b>					
Florida.....	140,500	146,700	133,600	115,000	115,000
California <sup>3</sup> .....	62,500	58,500	56,500	53,500	53,500
Texas <sup>3</sup> .....	1,949	1,419	1,788	1,825	1,825
United States.....	204,949	206,119	191,888	170,325	170,325
<b>Grapefruit</b>					
Florida-All.....	19,750	18,850	18,350	16,500	17,000
White.....	5,850	5,350	5,250	4,500	4,500
Colored.....	13,900	13,500	13,100	12,000	12,500
California <sup>3</sup> .....	4,310	4,000	4,000	4,000	4,000
Texas <sup>3</sup> .....	6,300	4,800	6,100	5,370	5,370
United States.....	30,360	27,650	28,450	25,870	26,370
<b>Lemons</b>					
California <sup>3</sup> .....	20,500	20,500	21,000	20,000	20,000
Arizona <sup>3</sup> .....	2,500	750	1,800	1,785	1,785
United States.....	23,000	21,250	22,800	21,785	21,785
<b>Tangelos</b>					
Florida.....	1,150	1,150	1,000	1,000	800
<b>Tangerines</b>					
Florida-All.....	4,650	4,290	3,280	3,400	3,500
Early <sup>4</sup> .....	2,600	2,330	1,910	1,800	1,800
Honey.....	2,050	1,960	1,370	1,600	1,700
California <sup>3,5</sup> .....	10,600	10,800	13,000	13,200	13,200
Arizona <sup>3,5</sup> .....	300	200	200	200	200
United States.....	15,550	15,290	16,480	16,800	16,900

<sup>1</sup> Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California-80, Florida-85, Texas-80; lemons-80; tangelos-90; tangerines and mandarins in Arizona and California-80, Florida-95.

<sup>2</sup> Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas. Includes small quantities of tangerines in Texas and Temples in Florida.

<sup>3</sup> Estimates carried forward from previous forecast.

<sup>4</sup> Fallglo and Sunburst varieties.

<sup>5</sup> Includes tangelos and tangors.

## All Oranges 115.0 Million Boxes

The 2013-2014 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 115.0 million boxes, unchanged from January, and 14 percent less than last season's production. The total includes 54.0 million boxes of the non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 61.0 million boxes of Valencia oranges.

The hurricane seasons of 2004-2005 and 2005-2006 have been excluded from the usual 10-year regression analysis and from comparisons of the current season to previous seasons. For those previous 8 seasons, the February forecast has deviated from final production by an average of 3 percent with 3 seasons above and 5 below, and differences ranging from 4 percent below to 9 percent above. All references to "average", "minimum", or "maximum" refer to the previous 8 non-hurricane seasons unless otherwise noted.

## Non-Valencia Oranges 54.0 Million Boxes

The forecast of non-Valencia production is unchanged at 54.0 million boxes. Size and drop components were final last month. The Row Count survey conducted on January 28-29, 2104 shows 75 percent of the early-midseason rows, and 87 percent of the Navel rows have been harvested. Estimated utilization to February 1, with an allocation for non-certified fruit, is 43.0 million boxes. The Navel forecast, included in the non-Valencia portion of the forecast, is unchanged at 1.9 million boxes.

## Valencia Oranges 61.0 Million Boxes

The forecast of Valencia production is unchanged at 61.0 million boxes. Current fruit size is below the minimum and is projected to be below the minimum at harvest. Droppage measurements showed a higher than average increase in the past month and is expected to be above the maximum at harvest.

## All Grapefruit 17.0 Million Boxes

The forecast of all grapefruit production is raised to 17.0 million boxes. The white grapefruit forecast continues at 4.5 million boxes while the colored grapefruit forecast is increased 500,000 boxes to 12.5 million boxes. Final fruit sizes for both white and colored grapefruit are slightly above the minimum. Final droppage rates for both white and colored grapefruit are the highest of any non-hurricane season. The Row Count survey conducted January 28-29, 2014 indicated 36 percent of the colored grapefruit and 19 percent of the white grapefruit are harvested.

## All Tangerines 3.5 Million Boxes

The forecast of all tangerine production is raised 100,000 boxes to 3.5 million boxes. The early tangerine forecast (Fallglo and Sunburst) is unchanged at 1.8 million boxes. Early tangerine harvest is complete for this season. The forecast of the later maturing Honey variety is increased to 1.7 million boxes. Final Honey fruit size is larger than recorded in two of the past three seasons, requiring 300 pieces of fruit to fill a 1-3/5 bushel box. The droppage rate of 36 percent is near average.

## Tangelos 800 Thousand Boxes

The forecast of tangelo production is lowered 200,000 boxes to 800,000 boxes. Estimated utilization to February 1 is 739,000 boxes, including an allocation for non-certified fruit. The Row Count survey conducted January 28-29, 2014 showed only two-thirds of the rows were harvested; however, utilization has dropped significantly over the past two weeks indicating harvest is nearly complete.

## FCOJ Yield 1.61 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) remains at 1.61 gallons per box of 42° Brix concentrate. The yield projection for the non-Valencia oranges is raised to 1.53 gallons per box while the projection for Valencia oranges is lowered to 1.69 gallons per box. Last season's final yield for all oranges was 1.587680 gallons per box, as reported by the Florida Department of Citrus. Last season's final yield for the components were 1.508465 for non-Valencia oranges and 1.692050 for Valencia oranges.

## Forecast Components, by Variety — Florida: February 2014

[Survey data is considered final in December for Navels, January for early-midseason oranges, February for grapefruit, and April for Valencias]

Type	Bearing trees (1,000 trees)	Fruit per tree (number)	Droppage (percent)	Fruit per box (number)
<b>ORANGES</b>				
Early-midseason.....	23,660	918	23	286
Navel.....	985	429	19	144
Valencia.....	32,149	614	25	238
<b>GRAPEFRUIT</b>				
White.....	1,282	555	29	118
Colored.....	3,617	500	25	123

## Maturity

Regular bloom fruit samples were collected from groves on established routes on January 28-29, 2014 in Florida's five major citrus producing areas and tested January 30-31, 2014. Acid levels on all varieties are higher than last season; solids (Brix) are lower on early and late oranges, and the same on midseason oranges. All orange varieties have lower ratios than last season. Compared to last month, unfinished juice per box is down only on early oranges, but lower for early and late oranges compared to last season. Solids per box are lower for early and late oranges compared to last season. The Indian River acid level on late oranges is lower than in other areas, resulting in higher ratios. Unfinished juice and solids per box are higher for Indian River late oranges.

### Citrus Unadjusted Maturity Tests — Florida: 2012-2013 and 2013-2014

[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. All samples were run through an FMC 091 machine using mechanical pressure only. This machine utilizes a .040 short strainer and standard 5/8 inch orifice tube. The beam settings are also identical to past tests and no restrictors are used]

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>ORANGES</b>										
Early (29-30)										
Sep 1.....	1.32	1.47	9.31	9.26	7.15	6.40	45.77	43.39	4.82	4.01
Oct 1.....	1.04	1.09	9.56	9.48	9.40	8.87	48.12	47.29	4.60	4.48
Nov 1.....	0.83	0.92	10.30	9.96	12.65	11.09	52.89	44.07	5.44	4.39
Dec 1.....	0.80	0.76	11.02	10.66	14.01	14.23	52.09	51.16	5.74	5.46
Jan 1.....	0.76	0.71	11.37	11.46	15.04	16.27	50.94	51.48	5.79	5.89
Feb 1.....	0.69	0.71	12.09	11.55	17.65	16.86	49.95	49.76	6.03	5.75
Midseason (15-17)										
Sep 1.....	1.45	1.73	9.33	9.15	6.57	5.38	46.48	41.62	4.34	3.81
Oct 1.....	1.19	1.31	9.55	9.52	8.09	7.60	48.62	46.88	4.64	4.46
Nov 1.....	0.95	1.17	10.39	10.36	11.16	9.12	51.29	44.18	5.33	4.58
Dec 1.....	0.95	0.98	11.26	11.64	11.97	12.11	52.64	49.67	5.92	5.78
Jan 1.....	0.91	0.92	11.86	12.29	13.29	13.87	52.75	50.97	6.24	6.27
Feb 1.....	0.85	0.92	12.57	12.57	15.10	14.48	52.14	52.29	6.54	6.60
Late (150-148)										
Sep 1.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1.....	2.16	2.18	8.81	8.66	4.17	4.01	45.00	46.33	3.97	4.01
Nov 1.....	1.69	1.84	9.29	9.26	5.60	5.10	51.32	50.85	4.77	4.71
Dec 1.....	1.51	1.51	10.10	10.06	6.84	6.77	53.56	54.28	5.41	5.46
Jan 1.....	1.34	1.27	10.90	10.89	8.26	8.68	54.56	54.17	5.95	5.90
Feb 1.....	1.13	1.20	11.80	11.23	10.62	9.51	55.62	55.44	6.56	6.22

(NA) Not available.

### Citrus Maturity Test Averages, by Areas — Florida: February 1, 2012-2013 and 2013-2014

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>ORANGES</b>										
Late										
Indian River (27-29).....	1.16	1.17	11.82	11.23	10.28	9.79	55.81	57.37	6.60	6.44
Other Areas (123-119).....	1.12	1.20	11.80	11.23	10.69	9.45	55.57	54.96	6.55	6.17

## Fruit Size Comparisons by Types to Previous Seasons

Size frequency distributions from the January size survey are shown in the following table. The distributions are by percent of fruit falling within the size range of each 4/5-bushel container. These frequency distributions include fruit from regular bloom and exclude fruit from summer bloom.

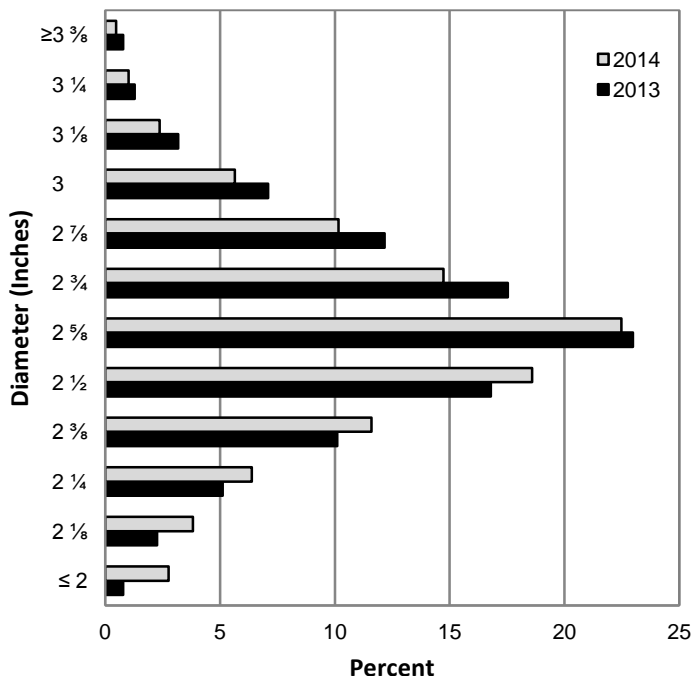
### Citrus Size Frequency Measurement Distributions, by Type — Florida: January Survey

Type and number of fruit per 4/5 – bushel containers	2012	2013	2014	Type and number of fruit per 4/5 – bushel containers	2012	2013	2014
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
<b>VALENCIA ORANGES</b>				<b>WHITE GRAPEFRUIT <sup>1</sup></b>			
64 or less .....	5.9	3.4	2.4	32 or less .....	14.0	5.1	6.0
80 .....	23.8	14.6	11.9	36 .....	19.1	10.5	10.9
100 .....	38.9	34.0	29.8	40 .....	16.3	10.8	11.9
125 .....	23.7	29.8	31.4	48 .....	17.5	15.0	14.5
163 or more .....	7.7	18.2	24.5	56 .....	10.3	12.8	11.3
				63 or more .....	22.8	45.8	45.4
<b>HONEY TANGERINES</b>				<b>COLORED GRAPEFRUIT</b>			
80 or less .....	24.2	9.2	15.2	32 or less .....	10.8	1.5	3.4
100 .....	25.0	19.1	22.0	36 .....	16.0	7.7	8.3
120 .....	23.0	29.2	26.0	40 .....	15.4	10.0	10.8
176 .....	11.7	17.3	14.3	48 .....	18.2	14.8	15.7
210 or more .....	16.1	25.2	22.5	56 .....	11.9	11.5	11.9
				63 or more .....	27.7	54.5	49.9

<sup>1</sup> Excludes seedy.

The charts below show the distribution of fruit sizes in 2014 compared to 2013. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

**Fruit Size Frequency Measurements, Valencia Oranges, by Diameter - Florida: January Survey**



**Fruit Size Frequency Measurements, White Seedless Grapefruit, by Diameter - Florida: January Survey**

