

United States Department of Agriculture **National Agricultural Statistics Service**

NOVEMBER FORECAST CITRUS MATURITY TEST RESULTS AND FRUIT SIZE



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November 10, 2008

ALL ORANGES 166.0 MILLION BOXES

The Florida all orange forecast remains at 166.0 million boxes. No changes are made to the forecast in November. The forecast includes 88.0 million boxes of early-midseason-Navel oranges (including Temples) and 78.0 million boxes of late season Valencia oranges.

This season, 60.0 million orange trees, a decrease of 2.5 percent from last season are used to expand fruit counts and measurements. The average fruit per tree on early-midseason oranges (excluding Navels) is two percent higher than last season, and on Valencias is 15 percent lower. Fruit sizes are projected to be larger than last season on all orange varieties.

WEATHER AND FIELD CONDITIONS

Weather conditions during the bloom period and early in the growing season were very beneficial, with warm temperatures and about average rainfall. Fertilizers were applied to assist in early fruit development. Fruit responded well with good progress and high quality across the citrus growing region. June was somewhat dry, but during July and August many areas received abundant rainfall, with some days well above historical records. September and October were dryer with only the East Coast and Southern Area receiving average rainfall. Growers with deficit rainfall during this period

CITRUS PRODUCTION: OCTOBER 1, 2008 Forecasts by varieties and states, with comparisons

Crop and State		Forecast							
Crop and State	2005-06	2006-07	2007-08	2008-09					
		1,000	boxes						
EARLY, MIDSEASON, AND	EARLY, MIDSEASON, AND NAVEL ORANGES:								
FLORIDA ^{1/}	75,000	65,600	83,500	88,000					
California	47,000	34,500	48,500	32,000					
Texas	1,400	1,600	1,500	1,300					
Arizona	250	200	230	150					
Total Above Varieties	123,650	101,900	133,730	121,450					
VALENCIAS:									
FLORIDA	72,700	63,400	86,700	78,000					
California	14,000	11,500	16,000	12,000					
Texas	200	380	234	200					
Arizona	200	100	150	100					
Total Valencias	87,100	75,380	103,084	90,300					
ALL ORANGES:									
FLORIDA	147,700	129,000	170,200	166,000					
California	61,000	46,000	64,500	44,000					
Texas	1,600	1,980	1,734	1,500					
Arizona	450	300	380	250					
Total All Oranges	210,750	177,280	236,814	211,750					

^{1/} Includes Temples beginning in 2006-07. Historic Temple production listed on page 2.

FORECAST DATES —	- 2008-09 SEASON
December 11, 2008	April 9, 2009
January 12, 2009	May 12, 2009
February 9, 2009	June 10, 2009
March 11, 2009	July 10, 2009

irrigated adequately to keep the trees and fruit in healthy condition. Most trees in well cared for groves look good, with heavy foliage and healthy fruit.

Grove activity includes limited harvesting, fertilizing, spraying, herbiciding, and cleaning groves in preparation for harvest. Citrus greening has been detected across the citrus belt. Pushing of trees is most common in the Southern Area where the disease is widespread. Other best management practices are being put into place to control the problem and eliminate future damage.

CROP PROGRESS

At the beginning of November, about 40 major packinghouses were open and shipping fruit, with only a few left that had not opened. Varieties being packed included early oranges (Navels, Ambersweet, and Hamlin), white and colored grapefruit, and early tangerines (Fallglo and Sunburst). Processing was still very limited with a few houses open but several more planning to open during the first two weeks of the month.

Grapefruit harvest started stronger this season than last season, but slowed some due to limited demand. Both white and colored varieties are picked primarily for the fresh market early in the season. Packinghouse eliminations that did not meet fresh fruit ratios were taken to processing plants for juice.

FCOJ YIELD 1.59 GALLONS PER BOX

With no November forecasts projections, the forecast for FCOJ yield remains at 1.59 gallons per box of 42° Brix concentrate. The average final yield over the past 10 seasons is 1.60 gallons per box. Last season's final yield was a record high 1.672737 gallons per box.

FLORIDA CITRUS: Distribution of 2007-08 production and 2008-09 forecast by marketing districts and fruit types

Fruit type	Indian River		Gulf		Florida SunRidge		State	
1 full type	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
	1,000 boxes							
ORANGES:								
Early-midseason-Navel 1/	4,600	4,700	17,400	19,000	61,500	64,300	83,500	88,000
Valencia	6,400	5,500	23,800	23,500	56,500	49,000	86,700	78,000
Total Oranges	11,000	10,200	41,200	42,500	118,000	113,300	170,200	166,000
GRAPEFRUIT:								
White	6,600	5,000	400	400	2,000	1,600	9,000	7,000
Colored	11,900	10,300	2,300	2,700	3,400	3,000	17,600	16,000
Total Grapefruit	18,500	15,300	2,700	3,100	5,400	4,600	26,600	23,000

^{1/} Includes Temples.

CITRUS PRODUCTION: October 1, 2008 forecasts by varieties and states, with comparisons

Crop and State		Production		Forecast
Crop and State	2005-06	2006-07	2007-08	2008-09
		1,000	boxes	
GRAPEFRUIT:				
FLORIDA-AII	19,300	27,200	26,600	23,000
White	6,500	9,300	9,000	7,000
Colored	12,800	17,900	17,600	16,000
California	6,000	5,500	5,700	5,500
Texas	5,200	7,100	6,100	5,300
Arizona	100	100	100	150
Total Grapefruit	30,600	39,900	38,500	33,950
LEMONS:				
California	22,000	18,500	17,000	19,000
Arizona	3,800	2,500	1,500	2,500
Total Lemons	25,800	21,000	18,500	21,500
Temples: Florida	700	1/	1/	1/
Tangelos: Florida	1,400	1,250	1,500	1,500
TANGERINES:				
FLORIDA-AII	5,500	4,600	5,500	4,900
Early 2/	2,850	2,400	2,600	2,900
Honey	2,650	2,200	2,900	2,000
California 3/	3,600	3,500	5,700	6,300
Arizona 3/	550	300	400	300
Total Tangerines	9,650	8,400	11,600	11,500

^{1/} Included in early-midseason-Navel oranges.

ESTIMATES OF PRODUCTION BY MARKETING DISTRICTS

Production forecasts for Florida oranges and grapefruit have been divided among marketing districts for this report. Comparisons (in the table above) are shown to the 2007-08 production. Marketing District II is the legally defined Indian River District along the East Coast. Marketing District III (Gulf) includes the counties of Charlotte, Collier, Glades, Hendry, and Lee. Marketing District I - the Florida SunRidge - includes all other citrus producing counties.

MATURITY TEST RESULTS

The maturity test results reported on page three are from fruit collected October 27-28 and tested October 29-31. Samples were collected from the same trees as in the previous two surveys. The chart on the top of the page shows a three month historical comparison between this season's remaining samples and last season's remaining samples. The chart on the bottom of the page shows this month's samples only, and separates the Indian River and all other areas.

Acid levels are lower than last season on all orange varieties, while solids (Brix) are higher on early and late oranges. The result is higher ratios on all orange varieties. Compared to last season, white grapefruit has higher acid and solids resulting in a lower ratio, while colored grapefruit has lower acid and solids (Brix) resulting in a higher ratio.

Juice levels and solids per box are higher this season on all orange varieties, and lower on both grapefruit varieties.

^{2/} Fallglo and Sunburst varieties.

^{3/} Includes tangelos and tangors.

UNADJUSTED MATURITY TESTS: Average of regular bloom fruit from sample groves, 2007-08 and 2008-09 seasons

Fruit type (No. groves)	Ac	id		lids rix)	Ra	itio		ed juice box		lids box
test date	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
	Per	cent	Per	cent			Pou	ınds	Pou	ınds
		Juice	and solids p	er box are	unadjusted	and not cor	nparable to	plant test r	esults.	
ORANGES:			-		-					
Early (120-120)										
Sep 1	1.75	1.45	9.45	9.25	5.51	6.51	40.93	46.91	3.86	4.34
Oct 1	1.25	1.07	10.28	9.63	8.39	9.14	45.93	48.90	4.72	4.71
Nov 1	0.87	0.82	10.21	10.24	11.92	12.67	50.98	52.63	5.20	5.38
Mid (55-55)										
Sep 1	1.99	1.66	9.63	9.00	4.91	5.49	41.52	45.09	4.00	4.06
Oct 1	1.49	1.29	9.62	9.41	6.58	7.47	46.19	50.76	4.44	4.78
Nov 1	1.00	0.89	10.30	10.19	10.51	11.63	50.72	53.69	5.22	5.47
Late (149-150)										
Sep 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct 1	2.62	2.48	9.47	8.86	3.66	3.62	43.86	47.40	4.15	4.20
Nov 1	1.95	1.86	9.27	9.30	4.82	5.07	48.85	51.82	4.53	4.82
GRAPEFRUIT:										
White Seedless (50-	47)									
Sep 1	1.94	1.71	10.17	9.56	5.30	5.61	30.64	30.96	3.11	2.96
Oct 1	1.64	1.60	10.12	10.06	6.19	6.35	35.58	36.62	3.59	3.68
Nov 1	1.41	1.43	9.98	10.08	7.13	7.09	41.26	39.67	4.11	4.00
Colored Seedless (4)	9-49)									
Sep 1	1.96	1.70	10.53	9.79	5.40	5.80	30.54	32.56	3.21	3.19
Oct 1	1.67	1.53	10.56	10.12	6.35	6.64	35.41	36.72	3.74	3.71
Nov 1	1.40	1.38	10.43	10.35	7.49	7.55	41.73	41.10	4.35	4.25

NOTICE: 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.

MATURITY TEST AVERAGES BY AREAS, NOVEMBER 1, 2008

Fruit type	Groves sampled	Acid	Solids (Brix)	Ratio	Unfinished juice per box	Solids per box
	Number	Percent	Percent		Pounds	Pounds
ORANGES:	-		-		•	-
EARLY						
Indian River	9	0.86	10.31	12.21	54.36	5.61
Other Areas	111	0.82	10.23	12.71	52.49	5.36
Midseason						
Indian River	11	0.96	10.33	10.91	54.08	5.58
Other Areas	44	0.88	10.15	11.81	53.60	5.44
LATE						
Indian River	27	2.02	9.38	4.70	51.26	4.80
Other Areas	123	1.83	9.28	5.15	51.95	4.82
GRAPEFRUIT:						
WHITE SEEDLESS						
Indian River	37	1.48	10.22	6.93	39.67	4.06
Other Areas	10	1.27	9.57	7.67	39.67	5.35
COLORED SEEDLESS						
Indian River	39	1.40	10.36	7.45	40.76	4.22
Other Areas	10	1.30	10.31	7.98	42.47	4.38

FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

Size frequency distributions developed from the October 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 relate to fruit from regular bloom and exclude summer bloom in all years.

FLORIDA CITRUS: Size frequency distributions from October measurements

EARLY AND MIDSEASON ORANGES: (excluding Navels) 64 and larger 80 9.0 3.3 4.7 100 27.2 16.1 22.2 125 33.9 32.4 39.0 163 and smaller 27.8 47.8 33.2 NAVEL ORANGES: 64 and larger 60.4 43.1 34.5 80 28.4 35.9 37.0 100 9.0 15.0 22.5 125 1.7 5.0 4.8 163 and smaller 0.5 1.0 1.2 VALENCIA ORANGES: 64 and larger 60.4 80 6.9 3.2 5.5 1.7 5.0 4.8 163 and smaller 0.5 1.0 1.2 VALENCIA ORANGES: 64 and larger 6.6 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.1 3.6 3.1 3.1 3.0 3.0 3.0 4 4 8 20.1 17.1 20.8 48 20.1 17.1 20.8 48 20.1 17.1 20.8 48 20.1 17.1 20.8 56 31.1 32.3 32.3 32.3 45 40 36 36 37.5 37.5 36 37.5 37.5 37.5 38 38 39.0 48 30 30.3 40 40 40 40 40 40 40 40 40 40 40 40 40	Type of fruit and size in 4/5-bushel containers	2006	2007	2008
EARLY AND MIDSEASON ORANGES: (excluding Navels) 64 and larger 2.1 0.4 0.9 80 9.0 3.3 4.7 100 27.2 16.1 22.2 125 33.9 32.4 39.0 163 and smaller 27.8 47.8 33.2 NAVEL ORANGES: 64 and larger 60.4 43.1 34.5 80 28.4 35.9 37.0 100 9.0 15.0 22.5 125 1.7 5.0 4.8 163 and smaller 0.5 1.0 1.2 VALENCIA ORANGES: 64 and larger 60.4 43.1 34.5 80 28.4 35.9 37.0 100 9.0 15.0 22.5 125 1.7 5.0 4.8 163 and smaller 0.5 1.0 1.2 VALENCIA ORANGES: 64 and larger 64 and larger 60.6 0.3 0.4 80 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 3.6 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 26.6 19.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 120 26.7 25.0 15.0 176 17. 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 17.6 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2			Percent -	
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125		9.0	3.3	4.7
125	100	27.2	16.1	22.2
NAVEL ORANGES: 64 and larger 64 and larger 80 28.4 35.9 37.0 100 9.0 15.0 22.5 125 1.7 5.0 4.8 163 and smaller 0.5 1.0 1.2 VALENCIA ORANGES: 64 and larger 80 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 29.5 46.6 25.6 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 32 and larger 32 and larger 33 6 11.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 29.5 46.6 25.6 FALLGLO TANGERINES: 80 and larger 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.9 50 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 67 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 17.6 7.7 14.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1		33.9	32.4	39.0
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163 and smaller 0.5 1.0 1.2 VALENCIA ORANGES: 64 and larger 0.6 0.3 0.4 80 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.	100	9.0	15.0	22.5
VALENCIA ORANGES: 64 and larger 0.6 0.3 0.4 80 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5	125	1.7	5.0	4.8
64 and larger 0.6 0.3 0.4 80 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 <t< td=""><td>163 and smaller</td><td>0.5</td><td>1.0</td><td>1.2</td></t<>	163 and smaller	0.5	1.0	1.2
80 6.9 3.2 5.5 100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5	VALENCIA ORANGES:			
100 27.9 16.9 29.5 125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5	64 and larger	0.6	0.3	0.4
125 35.1 33.0 39.0 163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0		6.9	3.2	5.5
163 and smaller 29.5 46.6 25.6 WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 40 16.6 9.4 15.8 48 20.1 17.1 20.8 48 20.1 17.1 22.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 <t< td=""><td>100</td><td>27.9</td><td>16.9</td><td>29.5</td></t<>	100	27.9	16.9	29.5
WHITE SEEDLESS GRAPEFRUIT: 32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 17.6 7.7 14.1	125	35.1	33.0	39.0
32 and larger 3.6 3.2 10.1 36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 17.6 7.7 14.1	163 and smaller	29.5	46.6	25.6
36 11.1 8.2 19.4 40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLIGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 3.6 1.4 2.1 100 and smaller 3.7 5.0 2.5 210 and smaller 3.7 5.0 2.5 210 and smaller 3.7 5.0 2.5 210 and smaller 3.9 3.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	WHITE SEEDLESS GRAPEFRUIT:			
40 21.5 13.4 18.7 48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLIGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 3.6 1.4 2.1 100 and larger 3.7 2.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	32 and larger	3.6	3.2	10.1
48 21.1 19.6 21.6 56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT:	36	11.1	8.2	19.4
56 16.3 15.8 10.8 63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger <t< td=""><td>40</td><td>21.5</td><td>13.4</td><td>18.7</td></t<>	40	21.5	13.4	18.7
63 and smaller 26.4 39.8 19.4 COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and smaller 2.6 1.4 2.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 1	48	21.1	19.6	21.6
COLORED SEEDLESS GRAPEFRUIT: 32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and smaller 2.6 1.4 2.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 2	56	16.3	15.8	10.8
32 and larger 2.6 1.9 6.0 36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 20 29.4 24.2 29.1	63 and smaller	26.4	39.8	19.4
36 8.3 5.1 12.9 40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	COLORED SEEDLESS GRAPEFRUIT:			
40 16.6 9.4 15.8 48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 20 29.4 24.2 29.1	32 and larger	2.6	1.9	6.0
48 20.1 17.1 20.8 56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	36	8.3	5.1	12.9
56 17.1 12.8 15.1 63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	40	16.6	9.4	15.8
63 and smaller 35.3 53.7 29.4 FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	48	20.1	17.1	20.8
FALLGLO TANGERINES: 80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 17.6 17.6 17.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2	56	17.1	12.8	15.1
80 and larger 46.6 37.5 37.5 100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	63 and smaller	35.3	53.7	29.4
100 18.3 32.5 45.0 120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	FALLGLO TANGERINES:			
120 26.7 25.0 15.0 176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	80 and larger	46.6	37.5	37.5
176 1.7 5.0 2.5 210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	100	18.3	32.5	45.0
210 and smaller 6.7 0.0 0.0 SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	120	26.7	25.0	15.0
SUNBURST TANGERINES: 80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	176			2.5
80 and larger 2.6 1.4 2.1 100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	210 and smaller	6.7	0.0	0.0
100 and larger 17.6 7.7 14.1 120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	SUNBURST TANGERINES:			
120 21.1 20.9 24.7 176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	80 and larger	2.6	1.4	2.1
176 18.9 19.8 17.9 210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	100 and larger		7.7	14.1
210 and smaller 39.8 50.2 41.2 TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	120	21.1	20.9	
TANGELOS: 80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	176	18.9	19.8	
80 and larger 14.8 10.2 17.4 100 27.9 17.7 30.4 120 29.4 24.2 29.1	210 and smaller	39.8	50.2	41.2
100 27.9 17.7 30.4 120 29.4 24.2 29.1	TANGELOS:			
120 29.4 24.2 29.1				
			17.7	
156 and smaller 27.9 47.9 23.1	120	29.4	24.2	29.1
	156 and smaller	27.9	47.9	23.1

The charts below describe the relationships of the fruit size measurements with those taken in the previous year. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

CHART 1: Early and midseason oranges (excluding Navels) size frequency by diameter from October measurements

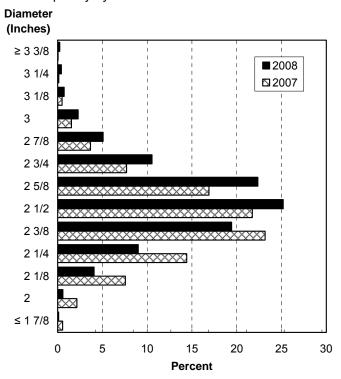


CHART 2: White seedless grapefruit size frequency by diameter from October measurements

