CITRUS

DECEMBER FORECAST MATURITY TEST RESULTS AND FRUIT SIZE



December 11, 2001

ALL ORANGES 231.0 MILLION BOXES

The December forecast of Florida oranges (excluding Temples) for the 2001-02 season remains at 231.0 million boxes, the amount initially forecast in October. Weather conditions this fall have been dry with temperatures above average, affecting fruit development. Objective indications are down slightly but remain supportive of this forecast.

Components of this forecast, released by the USDA Agricultural Statistics Board, are early-midseason-Navel oranges at 131.0 million boxes and Valencia oranges at 100.0 million boxes. In the past 10 non-freeze seasons, the December forecast has deviated from actual production by an average of 2.9 percent with four seasons above and six below the actual production.

EARLY-MIDSEASONS UNCHANGED AT 131.0 MILLION BOXES

The forecast of early-midseason-Navel oranges remains at the 131.0 million boxes established in October. If realized, this crop will be two percent greater than the previous season's but six percent less than the 1997-98 record crop of 140.0 million boxes.

Fruit sizes were close to the 10 season mean at the beginning of the season but current surveys show the growth rate has slipped away from the mean and the

Citrus production, December 1, 2001 forecasts by varieties and states, with comparisons

| Crop and State | Produ | uction | Forecast | | | | |
|---|--|---------------------------------|--|--|--|--|--|
| Crop and State | 1999-00 | 2000-01 | Nov 9, 2001 | Dec 11, 2001 | | | |
| Early, Midseason, and Navel Oranges: | 1,000 boxes | | | | | | |
| FLORIDA California Texas Arizona | 134,000 40,000 1,460 600 | 128,000 36,000 2,000 480 | 131,000 32,000 2,000 400 | 131,000 32,000 2,000 400 | | | |
| Total Above Varieties | 176,060 | 166,480 | 165,400 | 165,400 | | | |
| Valencias: | | | | | | | |
| FLORIDA California Texas Arizona | 99,000 24,000 200 500 | 95,300 23,000 235 420 | 100,000 22,000 200 350 | 100,000 22,000 200 350 | | | |
| Total Valencias | 123,700 | 118,955 | 122,550 | 122,550 | | | |
| All Oranges: | | | | | | | |
| FLORIDA California Texas Arizona | 233,000 64,000 1,660 1,100 | 223,300 59,000 2,235 900 | 231,000 54,000 2,200 750 | 231,000 54,000 2,200 750 | | | |
| Total All Oranges | 299,760 | 285,435 | 287,950 | 287,950 | | | |

FORECAST DATES 2001-02 SEASON

January 11, 2002 February 8, 2002 March 8, 2002 April 10, 2002 May 10, 2002 June 12, 2002 July 11, 2002

projection of fruit size is now slightly less than in October. Loss from droppage remains near average and the projection of final droppage is unchanged.

The **Navel** forecast is unchanged at 5.6 million boxes. Harvest is well underway and certifications through December 2 total over 1.8 million boxes. Fruit grew steadily, nearly attaining the projected below average size. Droppage is near the minimum level of the past 10 seasons.

VALENCIAS REMAIN 100.0 MILLION BOXES

Harvest will not begin until later in the season but objective indications continue to support the current forecast level of 100.0 million boxes. If realized, this crop will be larger than the previous three and only four percent less than the record 104.0 million boxes in 1997-98.

Although fruit sizes were slightly above average early in the season, the growth rate is tapering off and the projection of final size has fallen to slightly below the 10 season average. While fruit loss from droppage is greater than in the past two seasons, it remains below average.

FCOJ HELD AT 1.55 GALLONS

The all orange FCOJ yield projection is unchanged at 1.55 gallons per box of 42.0 degrees Brix concentrate. The final all orange yield for the 2000-01 season as reported by the Florida Citrus Processors Association was 1.580179. The final yield for the 1999-00 season was 1.547702 and for 1998-99 was 1.63381. A separate projection for fruit going into the early-midseason category and for Valencias will be made in the January crop report.

All projections of yield assume processing relationships this year remain somewhat constant with the past several seasons.

GRAPEFRUIT NOW AT 47.0 MILLION BOXES

The forecast of all varieties of grapefruit for certified utilization is 47.0 million boxes (including a preseason allocation of 1.5 million boxes for gift fruit and other use). The 1.0 million box reduction is in the all white category, now at 19.0 million boxes. Full utilization of the available white grapefruit crop is anticipated. There is no change in the 28.0 million box colored varieties forecast of expected utilization, however, surveys to measure and project fruit size and droppage now indicate a total available crop of 29.0 million boxes instead of 31.0 million earlier in the season. Instead of 3.0 million boxes of expected economic abandonment, indications now show only 1.0 million. In 1999 the Citrus Crop Estimates Advisory Committee requested that, in any season when economic abandonment is anticipated, an estimate of total available crop also be reported.

The contributing factors in the reductions are the predominately dry conditions during the past two months and continued above average temperatures. The two survey periods to determine average fruit size and growth rates clearly indicate the reductions of the projected average fruit size to harvest date. The **white** grapefruit growth rate during the past two months was 32 percent less (in spherical cu. in.) than the mean of the preceding 10 seasons. Growth rate for the **colored** grapefruit was 35 percent less using the same relationship. Fruit loss from droppage surveys did not show above average loss of the **white**. However, for the **colored** there was only one season in the past 10 that had more loss to date and only four in the past 20 seasons.

White grapefruit certifications through December 2, 2001, are estimated to be 991,000 boxes as compared with 962,000 boxes last season and 1,283,000 boxes in 1999-00. Colored certifications stand at 3,901,000 boxes this season as compared with 3,826,000 boxes last year and 4,508,000 boxes in 1999-00.

Citrus production, December 1, 2001 forecasts by varieties and states, with comparisons

| Torccasi | lorecasts by varieties and states, with compansons | | | | | | | | | |
|-------------------------|--|------------------------|----------|-------------|--|--|--|--|--|--|
| Crop and State | Prod | uction | Forecast | | | | | | | |
| | 1999-00 | -00 2000-01 Nov 9,2001 | | Dec 11,2001 | | | | | | |
| | 1,000 boxes | | | | | | | | | |
| Grapefruit: | | | | | | | | | | |
| FLORIDA-AII | 53,400 | 46,000 | 48,000 | 47,000 | | | | | | |
| White 1/ | 21,500 | 18,700 | 20,000 | 19,000 | | | | | | |
| Colored | 31,900 | ^{2/} 27,300 | 28,000 | 28,000 | | | | | | |
| Texas | 5,930 | 7,200 | 7,800 | 7,800 | | | | | | |
| Arizona | 450 | 250 | 200 | 200 | | | | | | |
| California | 7,200 | 6,500 | 6,000 | 6,000 | | | | | | |
| Total Grapefruit | 66,980 | 59,950 | 62,000 | 61,000 | | | | | | |
| Lemons: | | | | | | | | | | |
| California | 19,000 | 22,700 | 23,000 | 23,000 | | | | | | |
| Arizona | 3,100 | 3,600 | 3,100 | 3,100 | | | | | | |
| Total Lemons | 22,100 | 26,300 | 26,100 | 26,100 | | | | | | |
| Limes: Florida | 600 | 250 | 200 | 150 | | | | | | |
| Temples: Florida | 1,950 | 1,250 | 1,400 | 1,400 | | | | | | |
| Tangelos: Florida | 2,200 | 2,100 | 2,300 | 2,300 | | | | | | |
| K-Early: Florida | 110 | 40 | 50 | 30 | | | | | | |
| Tangerines: | | | | | | | | | | |
| FLORIDA-AII | 7,000 | 5,600 | 7,000 | 6,400 | | | | | | |
| Early 3/ | 4,350 | 3,550 | 4,800 | 4,300 | | | | | | |
| Honey | 2,650 | 2,050 | 2,200 | 2,100 | | | | | | |
| California 4/ | 2,500 | 2,100 | 2,500 | 2,500 | | | | | | |
| Arizona 4/ | 850 | 650 | 600 | 600 | | | | | | |
| Total Tangerines | 10,350 | 8,350 | 10,100 | 9,500 | | | | | | |

^{1/1} Includes seedy. ^{2/1} Excludes two million boxes of economic abandonment. ^{3/1} Robinson, Fallglo, Sunburst, and Dancy. ^{4/1} Includes tangelos.

ALL TANGERINES NOW 6.4 MILLION BOXES

The forecast of all varieties of tangerines is now 6.4 million boxes, down from 7.0 million boxes in October. Weather factors during the past two months have not been beneficial to crop condition. The current forecast is still 14 percent above last season's 5.6 million and is the second largest total crop of recorded tangerines.

The **Early** tangerine category forecast is 4.3 million boxes, down 0.5 million boxes, and is comprised of **Sunburst**, **Fallglo**, **Robinson**, and **Dancy** varieties in order of contribution. **Honey**, the later maturing variety, is reduced from October by 0.1 million boxes to 2.1 million boxes.

Sunburst, the major variety of early tangerines, contributes 80 percent to the early total. The final indication of average fruit size declined from a size at the 10 season mean in September to next to the smallest in November. Loss from droppage, also at mean level in September, was over two percent more than the projection at that time. The combination of these factors indicates a decrease in total expectations. The estimate still is more than the final harvest last season.

Fallglo, the only other variety of volume in the early category is usually over by December 1. The final allocation of certifications will probably be greater than last season. However, the fruit size decreased and loss factors increased during October from the original projections, again because of weather conditions. **Robinson** and **Dancy** constitute less than five percent of the total early category.

The **Honey** tangerines forecast at 2.1 million boxes is only slightly more than was recorded last season. Average fruit size in November continued to be the largest in the 10 season series. However, loss from droppage accelerated with the continued above average temperatures. Fruit droppage is a major factor in forecasting this crop. Loss in the 10 season series, as of late January, ranges from 21 percent to 55 percent. As of late November, almost 26 percent of fruit on the sample branches had been lost.

TEMPLES REMAIN AT 1.4 MILLION BOXES

The Temple forecast is maintained at 1.4 million boxes. The monthly surveys continue to indicate projected levels. The very small average size fruit has followed the growth curve and droppage remains slightly above the mean.

TANGELOS HELD AT 2.3 MILLION BOXES

The monthly surveys continue to support the 2.3 million box forecast level. Fruit size and loss are above average as projected earlier.

K-EARLY CITRUS NOW 30,000 BOXES

The estimate for K-Early Citrus Fruit is reduced from 50,000 to 30,000 boxes. Only 19,000 boxes are estimated to have been used as of December 1. If realized, this will be the smallest crop of record.

LIMES 240,000 BUSHELS

The 2001-02 lime crop, first forecast in April 2001, is decreased from 320,000 bushels (200,000 boxes) to 240,000 bushels (150,000 boxes). More trees have been lost to citrus canker since last spring. Fresh shipments to date are 180,000 bushels with four months remaining in the harvest season.

Unadjusted Maturity Tests: Average of regular bloom fruit from sample groves, 2000-01 and 2001-02 seasons

| Fruit type | | | Soli | | 1 2001-02 56 | a30113 | Unfinis | hed juice | Sol | ids |
|----------------------|---|---------|-------------|------------|------------------------|---------|------------|--------------|--------------|---------|
| (No. groves) | A | cid | (Bri | | Rat | io | | r box | per | |
| test date | 2000-01 | 2001-02 | 2000-01 | 2001-02 | 2000-01 | 2001-02 | 2000-01 | | 2000-01 | 2001-02 |
| | | cent | Perc | | | | | unds | Pou | |
| | Juice and solids per box are unadjusted and not comparable to plant test results. | | | | | | | | | |
| ODANOEO. | | | | | | | | | | |
| ORANGES: | | | | | | | | | | |
| Early (101-85) | | | | | | | | | | |
| Sep 1 | 1.66 | 1.41 | 9.79 | 9.64 | 6.01 | 6.99 | 42.62 | 43.44 | 4.17 | 4.19 |
| Oct 1 | 1.12 | 1.00 | 9.84 | 9.80 | 8.96 | 10.05 | 49.00 | 48.59 | 4.82 | 4.76 |
| Nov 1 | 0.97 | 0.82 | 10.72 | 10.51 | 11.30 | 13.05 | 51.16 | | 5.47 | 5.45 |
| Dec 1 | 0.89 | NA | 11.45 | NA | 13.14 | NA | 51.08 | NA | 5.85 | NA |
| Midseason (51-48) | | | | | | | | | | |
| Sep 1 | 1.79 | 1.60 | 9.32 | 9.33 | 5.26 | 5.94 | 44.43 | | 4.14 | 4.00 |
| Oct 1 | 1.23 | 1.18 | 9.48 | 9.50 | 7.84 | 8.24 | 49.99 | 49.79 | 4.73 | 4.73 |
| Nov 1 | 1.06 | 0.96 | 10.44 | 10.44 | 10.12 | 11.09 | 53.53 | | 5.59 | 5.57 |
| Dec 1 | 0.95 | NA | 11.37 | NA | 12.17 | NA | 53.29 | NA | 6.06 | NA |
| Late (150-150) | | | | | | | | | | |
| Sep 1 | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| Oct 1 | 2.45 | 2.19 | 8.80 | 8.87 | 3.65 | 4.11 | 46.50 | | 4.09 | 4.23 |
| Nov 1 | 2.00 | 1.76 | 9.46 | 9.20 | 4.80 | 5.31 | 50.80 | | 4.81 | 4.79 |
| Dec 1 | 1.74 | NA | 10.37 | NA | 6.03 | NA | 52.17 | NA | 5.41 | NA |
| GRAPEFRUIT: | | | | | | | | | | |
| White Seedless (46-4 | 7) | | | | | | | | | |
| Sep 1 | 1.83 | 1.67 | 10.15 | 9.82 | 5.47 | 5.91 | 32.70 | 33.86 | 3.32 | 3.33 |
| Oct 1 | 1.58 | 1.46 | 10.22 | 9.73 | 6.52 | 6.70 | 36.84 | | 3.76 | 3.78 |
| Nov 1 | 1.50 | 1.33 | 10.38 | 9.81 | 6.98 | 7.43 | 40.56 | | 4.20 | 4.16 |
| Dec 1 | 1.47 | 1.26 | 10.78 | 9.96 | 7.36 | 7.93 | 41.79 | 44.48 | 4.50 | 4.43 |
| Colored Seedless (44 | -44) | | | | | | | | | |
| Sep 1 | 1.76 | 1.65 | 10.37 | 10.05 | 5.91 | 6.12 | 33.37 | 34.62 | 3.46 | 3.48 |
| Oct 1 | 1.51 | 1.43 | 10.44 | 10.08 | 6.96 | 7.06 | 37.15 | 40.15 | 3.87 | 4.05 |
| Nov 1 | 1.43 | 1.26 | 10.68 | 10.16 | 7.53 | 8.10 | 40.53 | 43.93 | 4.33 | 4.47 |
| Dec 1 | 1.39 | 1.21 | 10.88 | 10.37 | 7.87 | 8.59 | 43.32 | 44.85 | 4.71 | 4.66 |
| | | Matu | wit | | D | | 01 | | | |
| | | Groves | | | areas, Decei Solids | | | Unfinished | 1 | Solids |
| Fruit type | | sampled | Ac | cid | (Brix) | Ra | itio | juice per bo | | er box |
| | <u> </u> | Number | Pero | cent | Percent | | | Pounds | | ounds |
| ORANGES: | | Number | 1 010 | 50111 | reroont | | | 1 oundo | | Carrao |
| Early | | | | | | | | | | |
| Îndian River Dist. | | | | | | | | | | |
| Other Areas | | | | | | | | | | |
| Midseason | *** NOTICE *** | | | | | | | | | |
| Indian River Dist. | Maturity test results for oranges are not available | | | | | | | | | |
| Other Areas | | | iviatu | ility test | lesuits io | oranges | s are no | n avallable | , | |
| Late | this month because of a malfunction of the testing equipment. | | | | | | | | | |
| Indian River Dist. | | UII | 5 111011111 | Decause | oi a iliali | unction | טו נוופ נפ | sung equi | pineni. | |
| Other Areas | | | | | | | | | | |
| GRAPEFRUIT: | | | | | | | | | | |
| White Seedless | | | | | | | | | | |
| Indian River Dist. | | 34 | | 1.26 | 9.89 | 7 | 7.88 | 44. | 27 | 4.37 |
| Other Areas | | 13 | | 1.26 | 10.13 | | 3.07 | 45. | | 4.57 |
| Colored Seedless | | .0 | | | | | | .0. | | |
| Indian River Dist. | | 37 | | 1.21 | 10.49 | 8 | 3.70 | 45. | 46 | 4.77 |
| Other Areas | | 7 | | 1.24 | 9.77 | | 3.00 | 41. | | 4.09 |
| | | - | | | | | | | • | |

FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

Size frequency distributions are from the November size survey conducted in sample groves during the period of November 5 through 30, 2001. The distributions are by percent from fruit within the size range of each 4/5 bushel container. These percents relate only to fruit from spring bloom and exclude summer bloom fruit in all seasons.

Florida Citrus: Size frequency distributions from November measurements

| Type of fruit and size in 4/5-bushel containers | 1999 | 2000 | 2001 | |
|---|--------------|--------------|--------------|--|
| | Percent | | | |
| Early and midseason oranges: | | | | |
| (excluding Navels) | | | | |
| 64 and larger | 2.3 | 0.5 | 2.2 | |
| 80 | 13.0 | 5.0 | 7.9 | |
| 100 | 36.9 | 24.2 | 29.8 | |
| 125 | 32.4 | 39.1 | 35.9 | |
| 163 and smaller | 15.4 | 31.2 | 24.2 | |
| Navel oranges: | 70.0 | 50.7 | E0.4 | |
| 64 and larger | 72.2 19.8 | 56.7 | 58.1 | |
| 80 100 | 6.5 | 28.9 12.1 | 29.2 10.0 | |
| 125 | 1.4 | 2.1 | 2.2 | |
| 163 and smaller | 0.1 | 0.2 | 0.5 | |
| White seedless grapefruit: | 0.1 | 0.2 | 0.5 | |
| 32 and larger | 11.7 | 9.5 | 7.3 | |
| 36 | 17.3 | 15.9 | 14.9 | |
| 40 | 19.9 | 21.6 | 20.4 | |
| 48 | 18.3 | 21.8 | 21.8 | |
| 56 | 11.5 | 12.2 | 13.5 | |
| 63 and smaller | 21.3 | 19.0 | 22.1 | |
| Colored seedless grapefruit: | | | | |
| 32 and larger | 5.0 | 4.7 | 3.9 | |
| 36 | 11.3 | 11.0 | 11.9 | |
| 40 | 19.9 | 20.0 | 17.5 | |
| 48 | 21.2 | 21.9 | 22.4 | |
| 56 | 14.3 | 16.5 | 15.5 | |
| 63 and smaller | 28.3 | 25.9 | 28.8 | |
| Sunburst tangerines: | -4- | 70 4 | 00.4 | |
| 150 and larger | 71.7 | 72.4 | 63.1 | |
| 176 | 13.9 | 16.2 | 15.2 | |
| 210 246 | 9.2 4.2 | 8.8 2.4 | 9.8 6.7 | |
| 294 and smaller | 1.0 | 0.2 | 5.2 | |
| Honey tangerines: | 1.0 | 0.2 | 5.2 | |
| 150 and larger | 63.4 | 74.9 | 77.8 | |
| 176 | 15.8 | 11.8 | 9.1 | |
| 210 | 11.1 | 9.1 | 7.9 | |
| 246 | 6.3 | 3.4 | 3.9 | |
| 294 and smaller | 3.4 | 0.8 | 1.3 | |
| Temples: | | | | |
| 80 and larger | 14.9 | 12.3 | 8.8 | |
| 100 | 33.7 | 37.4 | 38.9 | |
| 120 | 29.3 | 38.0 | 35.8 | |
| 156 and smaller | 22.1 | 12.3 | 16.5 | |
| Tangelos: | | | | |
| 80 and larger | 40.4 | 22.4 | 41.5 | |
| 100 | 31.3 | 38.3 | 31.8 | |
| 120 | 18.4 | 28.2 | 16.7 | |
| 156 and smaller | 9.9 | 11.1 | 10.0 | |

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 November measurements.

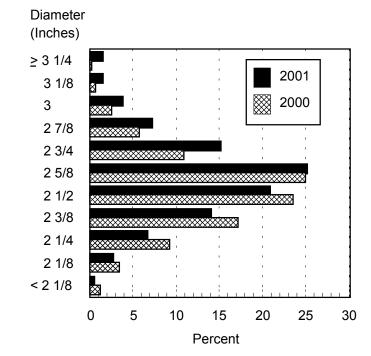


CHART 2: White seedless grapefruit size frequency by diameter from November measurements.

Diameter (Inches)

