## United States Department of Agriculture

 National Agricultural Statistics ServiceCITRUS February Forecast
Maturity Test Results and Fruit Size

Cooperating with the Florida Department of Agriculture \& Consumer Services
1222 Woodward St. • Orlando, FL 32803
(407) 648-6013 • (407) 648-6029 FAX • www.nass.usda.gov/fl

February 9, 2007

## ALL ORANGES 140.0 MILLION BOXES

The Florida all orange forecast released today by the USDA Agricultural Statistics Board remains at 140.0 million boxes. Both categories remain unchanged, the early-midseason-Navel portion at 75.0 million boxes and the Valencia portion at 65.0 million. In the past 10 non-hurricane affected seasons, the February all orange forecast has differed from actual production by an average of 2.4 percent, with four seasons below and six above the final harvest.

Warm winter temperatures along with adequate rainfall supplemented by irrigation have resulted in fruit size increasing at an above normal rate. Cooler temperatures near the end of January were welcomed to slow down bloom bud formation and aid in harvest of the remaining early-mid oranges.

Due to the freeze that hit the western states in mid-January, NASS will publish updated forecasts for all states in the March report. Revisions to the 2005-06 utilized production for all states will also be published in March.

## EARLY-MIDSEASON-NAVEL 75.0 MILLION BOXES

The early-midseason-Navel forecast is continued at 75.0 million boxes, including 3.5 million boxes of Navels. The Navel harvest volume is declining weekly but the Row Count survey indicates some fruit still

Citrus Production: February 1, 2007
Forecasts by varieties and states, with comparisons

| Crop and State | Production |  | Forecast |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2004-05 | 2005-06 | Jan 12, 2007 | Feb 9, 2007 |
| -- - 1,000 boxes -- |  |  |  |  |
| Early, Midseason, and Navel Oranges: |  |  |  |  |
| FLORIDA ${ }^{1 /}$ | 79,100 | 75,000 | 75,000 | 75,000 |
| California | 44,000 | 45,500 | 33,000 | 33,000 |
| Texas | 1,500 | 1,400 | 1,710 | 1,710 |
| Arizona | 240 | 250 | 200 | 200 |
| Total Above Varieties | 124,840 | 122,150 | 109,910 | 109,910 |
| Valencias: |  |  |  |  |
| FLORIDA | 70,700 | 72,900 | 65,000 | 65,000 |
| California | 20,500 | 12,000 | 13,000 | 13,000 |
| Texas | 270 | 200 | 270 | 270 |
| Arizona | 190 | 200 | 150 | 150 |
| Total Valencias | 91,660 | 85,300 | 78,420 | 78,420 |
| All Oranges: |  |  |  |  |
| FLORIDA | 149,800 | 147,900 | 140,000 | 140,000 |
| California | 64,500 | 57,500 | 46,000 | 46,000 |
| Texas | 1,770 | 1,600 | 1,980 | 1,980 |
| Arizona | 430 | 450 | 350 | 350 |
| Total All Oranges | 216,500 | 207,450 | 188,330 | 188,330 |

[^0]
## FORECAST Dates 2006-07 SEASON

March 9, 2007
April 10, 2007
June 11, 2007

May 11, 2007
available for harvest. The early-midseason Row Count survey indicates 75 percent of the rows harvested. Estimated utilization to February 1, at 52.8 million boxes, supports the current forecast. The remaining early-midseason oranges also continued to grow in size with droppage at normal rates.

Harvest has been at peak levels in January with processors reporting excellent quality juice. Harvest labor has been adequate to maintain plant deliveries on a timely schedule.

## VALENCIA ORANGES 65.0MILLION BOXES

The forecast for Valencia oranges remains at 65.0 million boxes. Because of the very warm temperatures, average fruit size increased at an above normal rate and it is now expected to take 194 pieces of fruit to fill a $1-3 / 5$ bushel box. The droppage rate also increased during January and is expected to be slightly above the ten season average by harvest. With the expected larger fruit sizes and higher droppage, indications of total harvest increased only slightly. Harvest has started but is very limited.

Components Used in the February Forecast

| Type | Bearing <br> Trees | Fruit <br> per <br> Tree | Percent <br> Droppage | Fruit per <br> Box |  |
| :--- | :---: | :---: | ---: | :---: | :---: |
| $(1,000)$ |  |  |  |  |  |
| ORANGES: |  |  |  |  |  |
| Early-Mid | 27,209 | 696 | 8 | 233 |  |
| Navel | 1,467 | 342 | 10 | 130 |  |
| Valencia | 37,133 | 428 | 16 | 194 |  |

## FCOJ YIELD NOW 1.61GALLONS PER BOX

The projection of FCOJ yield is increased from 1.58 gallons per box to 1.61 . The early-mid portion is increased from 1.51 to 1.55 gallons per box. The Valencia portion remains at 1.70 gallons per box.

## GRAPEFRUIT REMAINS 26.0 MILLION BOXES

The forecast of grapefruit for certified utilization (including an allocation of 700,000 boxes of other use) is continued from last month and is unchanged since October at 26.0 million boxes. The forecast is comprised of 9.0 million boxes of white and 17.0 million of colored varieties. If realized, this will be 35 percent more than last season's 19.3 million boxes utilized.

The fruit size and drop measurements used in the production expansions are final. In general, with the very warm January temperatures and adequate rainfall supplemented by irrigation, fruit sizes increased more than normal and more than anticipated. Droppage, however, increased substantially and is above any of the previous 10 non-hurricane seasons. These offsetting factors resulted in the indicators remaining relatively close to the current forecasts. The table at the right contains the final objective count measurements for this season.

The first route survey (Row Count) for grapefruit was conducted January 30-31 and, with the limited harvest, was inconclusive. Estimated utilization of white grapefruit is 2.3 million boxes compared to 2.5 million to the same time last season. Fresh shipments for export are heavy with direct to processor harvest just beginning. Colored estimated utilization is 6.7 million boxes compared to 5.6 million last season. Shipments for fresh domestic and export use are heavy with mostly eliminations being used for processing. External and internal quality is reported as excellent.

Citrus Production: February 1, 2007 forecasts by varieties and States, with comparisons

| Crop and State | Production |  | Forecast |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $2004-05$ | $2005-06$ | Jan 12, 2007 | Feb 9, 2007 |


| GRAPEFRUIT: |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Florida-All | $\mathbf{1 2 , 8 0 0}$ | $\mathbf{1 9 , 3 0 0}$ | $\mathbf{2 6 , 0 0 0}$ | $\mathbf{2 6 , 0 0 0}$ |
| $\quad$ White | $\mathbf{3 , 4 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{9 , 0 0 0}$ | $\mathbf{9 , 0 0 0}$ |
| Colored | $\mathbf{9 , 4 0 0}$ | $\mathbf{1 2 , 8 0 0}$ | $\mathbf{1 7 , 0 0 0}$ | $\mathbf{1 7 , 0 0 0}$ |
| California | 6,100 | 6,000 | 6,000 | 6,000 |
| Texas | 6,600 | 5,200 | 6,500 | 6,500 |
| Arizona | 140 | 100 | 100 | 100 |
| Total Grapefruit | 25,640 | 30,600 | 38,600 | 38,600 |

Lemons:

| California | 20,500 | 21,000 | 20,500 | 20,500 |
| :--- | ---: | ---: | ---: | ---: |
| Arizona | 2,400 | 3,800 | 2,800 | 2,800 |
| Total Lemons | 22,900 | 24,800 | 23,300 | 23,300 |
| TempLes: Florida | $\mathbf{6 5 0}$ | $\mathbf{7 0 0}$ | $\mathbf{1 /}$ | $\mathbf{1 /}$ |
| TangeLos: Florida | $\mathbf{1 , 5 5 0}$ | $\mathbf{1 , 4 0 0}$ | $\mathbf{1 , 1 0 0}$ | $\mathbf{1 , 2 0 0}$ |


|  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Tangerines: | $\mathbf{4 , 4 5 0}$ | $\mathbf{5 , 5 0 0}$ | $\mathbf{4 , 6 0 0}$ | $\mathbf{4 , 6 0 0}$ |
| Florida-All | $\mathbf{2 , 4 5 0}$ | $\mathbf{2 , 8 5 0}$ | $\mathbf{2 , 4 0 0}$ | $\mathbf{2 , 4 0 0}$ |
| $\quad$ Early ${ }^{2 /}$ | $\mathbf{2 , 0 0 0}$ | $\mathbf{2 , 6 5 0}$ | $\mathbf{2 , 2 0 0}$ | $\mathbf{2 , 2 0 0}$ |
| Honey | 2,900 | 3,600 | 3,800 | 3,800 |
| California $^{3 /}$ | 400 | 550 | 400 | 400 |
| Arizona $^{3 /}$ | 7,750 | 9,650 | 8,800 | 8,800 |
| Total Tangerines |  |  |  |  |

[^1]| Components Used in the February Forecast |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Type | Bearing <br> Trees | Fruit per <br> Tree | Percent <br> Droppage | Fruit <br> per <br> box |
| $(1,000)$ |  |  |  |  |
| Grapefruit: $^{\text {White }}$ |  |  |  |  |
| 1/ | 2,067 | 469 | 12 | 84 |
| Colored | 4,243 | 447 | 16 | 91 |

${ }^{1 /}$ Seedless variety only.

Due to the freeze that hit the western states in mid-January, NASS will publish updated forecasts for all states in the March report. NASS will survey growers and packers to make new forecasts. Revisions to the 2005-06 utilized production for all states will also be published in the March report.

## ALL TANGERINES UNCHANGED AT 4.6 MILLION BOXES

The forecast of all tangerines is unchanged at 4.6 million boxes. Comprising the forecast are the early varieties (Fallglo and Sunburst) at 2.4 million boxes and the later maturing Honey variety at 2.2 million boxes.

Estimated utilization to the first of the month for the early tangerines is 2.38 million boxes. Harvest of the Fallglo variety is complete at just over 630,000 boxes and harvest of the Sunburst variety has tapered off and is nearly finished at 1.75 million boxes. Utilization to this point last season was 2.8 million boxes.

The Honey tangerines experienced a growth surge during January. The average measurement which is used in the final direct expansion calculation is greater than the average of the 1994 through 2003 seasons. Only 227 fruit will be required to fill a 1-3/5 bushel box. Droppage, which has been below average all season, continued as projected and is final at 31 percent. The regression utilizing size and drop data from the past 10 nonhurricane seasons fully supports this forecast. Harvest has begun and is slightly ahead of last season to date. With only 11 percent of the rows picked, it is too soon for the route survey to be a reliable indicator. The Row Count results will become more important as the harvest progresses.

## TANGELOS NOW 1.2 MILLION BOXES

The tangelo forecast is raised 100,000 boxes in the first change this season. The increase is based on the estimated utilization to February 1 which has surpassed 1.0 million boxes, plus an allotment for non-certified use of 100,000 boxes, and an allocation for the remaining harvest. Results of the Row Count survey conducted January 30-31 indicate 19 percent of the rows available for harvest. Although the forecast is less than the production of the two previous hurricane seasons, it is 20 percent more than the 2003-04 crop.

Unadjusted Maturity Tests: Average of regular bloom fruit from sample groves, 2005-06 and 2006-07 seasons

| Fruit type (No. groves) test date | Acid |  | Solids (Brix) |  | Ratio |  | Unfinished juice per box |  | Solids per box |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005-06 | 2006-07 | 2005-06 | 2006-07 | 2005-06 | 2006-07 | 2005-06 | 2006-07 | 2005-06 | 2006-07 |

## Oranges:

Early (43-25)

| Sep 1 | 1.81 | 1.76 | 9.30 | 9.42 | 5.18 | 5.48 | 38.53 | 42.75 | 3.58 | 4.01 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Oct 1 | 1.38 | 1.22 | 9.39 | 9.49 | 6.92 | 8.05 | 44.87 | 49.04 | 4.20 | 4.65 |
| Nov 1 | 0.93 | 0.98 | 9.90 | 10.27 | 10.83 | 10.78 | 50.32 | 50.42 | 4.98 | 5.18 |
| Dec 1 | 0.84 | 0.89 | 10.66 | 10.80 | 12.90 | 12.29 | 51.28 | 50.58 | 5.47 | 5.46 |
| Jan 1 | 0.80 | 0.77 | 11.39 | 11.75 | 14.34 | 15.47 | 49.74 | 50.67 | 5.66 | 5.96 |
| Feb 1 | 0.76 | 0.76 | 12.60 | 12.55 | 16.80 | 16.90 | 49.47 | 50.77 | 6.24 | 6.36 |
| Midseason (26-21) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | 2.02 | 1.77 | 9.06 | 9.31 | 4.53 | 5.39 | 39.84 | 43.53 | 3.61 | 4.05 |
| Oct 1 | 1.57 | 1.27 | 9.37 | 9.52 | 6.07 | 7.61 | 45.27 | 50.66 | 4.24 | 4.83 |
| Nov 1 | 1.13 | 1.06 | 9.97 | 10.30 | 8.94 | 9.77 | 51.29 | 50.63 | 5.11 | 5.22 |
| Dec 1 | 1.01 | 0.87 | 10.96 | 10.80 | 11.00 | 12.49 | 51.97 | 52.89 | 5.69 | 5.72 |
| Jan 1 | 0.96 | 0.82 | 11.92 | 12.11 | 12.66 | 14.97 | 51.73 | 52.58 | 6.17 | 6.38 |
| Feb 1 | 0.99 | 0.78 | 13.16 | 12.91 | 13.71 | 16.84 | 50.48 | 51.42 | 6.64 | 6.64 |
| Late (148-150) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Oct 1 | 2.60 | 2.50 | 9.02 | 8.91 | 3.51 | 3.59 | 43.06 | 45.75 | 3.88 | 4.08 |
| Nov 1 | 1.98 | 2.02 | 9.15 | 9.82 | 4.66 | 4.94 | 48.16 | 48.78 | 4.41 | 4.79 |
| Dec 1 | 1.64 | 1.70 | 9.83 | 9.88 | 6.07 | 5.89 | 51.04 | 51.66 | 5.02 | 5.10 |
| Jan 1 | 1.41 | 1.40 | 10.72 | 10.88 | 7.68 | 7.85 | 52.51 | 51.81 | 5.63 | 5.63 |
| Feb 1 | 1.29 | 1.22 | 11.84 | 11.97 | 9.26 | 9.94 | 53.40 | 54.56 | 6.32 | 6.53 |

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, February 1, 2007

| Fruit type | Groves sampled | Acid | Solids (Brix) | Ratio | Unfinished juice per box | Solids per box |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Percent |  | Pounds | Pounds |
| Oranges: |  |  |  |  |  |  |
| Early |  |  |  |  |  |  |
| Indian River District | 4 | 0.74 | 12.80 | 17.28 | 51.03 | 6.58 |
| Other Areas | 21 | 0.76 | 12.50 | 16.83 | 50.72 | 6.32 |
| Midseason |  |  |  |  |  |  |
| Indian River District | 8 | 0.85 | 13.59 | 16.04 | 51.95 | 7.06 |
| Other Areas | 13 | 0.74 | 12.49 | 17.34 | 51.09 | 6.39 |
| Late |  |  |  |  |  |  |
| Indian River District | 26 | 1.20 | 12.30 | 10.34 | 55.33 | 6.81 |
| Other Areas | 124 | 1.22 | 11.90 | 9.86 | 54.40 | 6.47 |

## FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

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

| Florida Citrus: Size frequency distributions from January measurements |  |  |  |
| :---: | :---: | :---: | :---: |
| Type of fruit and size in 4/5-bushel containers | 2005 | 2006 | 2007 |
|  | - Percent - - |  |  |
| Valencia Oranges: |  |  |  |
| 64 and larger | 2.7 | 2.3 | 10.8 |
| 80 | 18.6 | 12.4 | 30.3 |
| 100 | 43.7 | 35.1 | 36.2 |
| 125 | 26.7 | 32.8 | 17.3 |
| 163 and smaller | 8.3 | 17.4 | 5.4 |
| White Seedless Grapefruit: |  |  |  |
| 32 and larger | 26.4 | 26.7 | 30.0 |
| 36 | 25.7 | 25.2 | 24.0 |
| 40 | 20.0 | 20.8 | 19.3 |
| 48 | 12.4 | 11.4 | 11.1 |
| 56 | 7.5 | 7.0 | 6.3 |
| 63 and smaller | 8.0 | 8.9 | 9.3 |
| Colored Seedless Grapefruit: |  |  |  |
| 32 and larger | 9.2 | 22.5 | 17.1 |
| 36 | 20.2 | 18.6 | 21.4 |
| 40 | 26.2 | 22.2 | 23.6 |
| 48 | 21.6 | 15.6 | 17.1 |
| 56 | 10.7 | 10.0 | 10.2 |
| 63 and smaller | 12.1 | 11.1 | 10.6 |
| Honey tangerines: |  |  |  |
| 80 and larger | 26.5 | 19.8 | 43.6 |
| 100 | 34.9 | 41.3 | 31.6 |
| 120 | 27.3 | 26.0 | 15.9 |
| 176 | 5.8 | 6.0 | 4.8 |
| 210 and smaller | 5.5 | 6.9 | 4.1 |

The charts to the right 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: Valencia orange size frequency by diameter from January measurements


Chart 2: White seedless grapefruit size frequency by diameter from January measurements



[^0]:    ${ }^{1 /}$ Includes Temples beginning in 2006-07. Historic Temple production listed on page 2.

[^1]:    ${ }^{1 /}$ Included in early-midseason-Navel oranges.
    ${ }^{2 /}$ Fallglo and Sunburst varieties.
    ${ }^{3 /}$ Includes tangelos and tangors.

