Florida Agricultural Statistics Service 1222 Woodward Street
Orlando, Florida 32803
407 / 648-6013
http://www.nass.usda.gov/fl
CITRUS

# FLORIDA 

 AGRICULTURE
## FEBRUARY FORECAST <br> MATURITY TEST RESULTS AND FRUIT SIZE

February 8, 2002

## ALL ORANGES DOWN AT 228.0 MILLION BOXES

The 2001-02 Florida all orange forecast released today by the USDA Agricultural Statistics Board is decreased from 231.0 to 228.0 million boxes. Components of the forecast are early and midseason oranges (including Navels) reduced to 128.0 million boxes and Valencia oranges unchanged at 100.0 million boxes. If realized, this crop will be two percent greater than last season's utilization and the third largest on record, superceded only by the harvests of 199798 and 1999-00. In the past 10 non-freeze seasons, the February forecast has deviated from final utilization by an average of 2.2 percent with five seasons above and five seasons below.

## EARLY-MIDSEASONS REDUCED TO 128.0 MILLION BOXES

The forecast of early-midseason oranges, changed for the first time this season, is down three million boxes, or two percent, to 128.0 million boxes. This forecast includes the Navels which remain at 5.6 million boxes. The Row Count survey conducted on January 30-31, 2002, indicates fewer than 15 percent of the Navel rows unharvested and about 25 percent of the other early-midseason rows remaining. The dry and warm weather has affected the unharvested fruit, especially in the Western Area where the most unharvested fruit remains. Total droppage in the Western Area has been above the state average all season and now

Citrus production, February 1, 2002
forecasts by varieties and states, with comparisons

| Crop and State | Production |  | Forecast |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $1999-00$ | $2000-01$ | Jan 11, 2002 | Feb 8, 2002 |
| Early, Midseason, | $-\mathbf{- 1 , 0 0 0}$ boxes $-\mathbf{-}$ |  |  |  |
| and Navel Oranges: |  |  |  |  |
| FLORIDA | 134,000 | $\mathbf{1 2 8 , 0 0 0}$ | 131,000 | $\mathbf{1 2 8 , 0 0 0}$ |
| California | 40,000 | 36,000 | 32,000 | 32,000 |
| Texas | 1,460 | 2,000 | 1,700 | 1,700 |
| Arizona | 600 | 480 | 350 | 350 |
| Total Above Varieties | 176,060 | 166,480 | 165,050 | 162,050 |
| Valencias: |  |  |  |  |
| FLORIDA | 99,000 | 95,300 | 100,000 | 100,000 |
| California | 24,000 | 23,000 | 22,000 | 22,000 |
| Texas | 200 | 235 | 200 | 200 |
| Arizona | 500 | 420 | 350 | 350 |
| Total Valencias | 123,700 | 118,955 | 122,550 | 122,550 |
| All Oranges: |  |  |  |  |
| FLORIDA | 233,000 | 223,300 | 231,000 | $\mathbf{2 2 8 , 0 0 0}$ |
| California | 64,000 | 59,000 | 54,000 | 54,000 |
| Texas | 1,660 | 2,235 | 1,900 | 1,900 |
| Arizona | 1,100 | 900 | 700 | 700 |
| Total All Oranges | 299,760 | 285,435 | 287,600 | 284,600 |

## FORECAST DATES 2001-02 SEASON

March 8, 2002
May 10, 2002
April 10, 2002
June 12, 2002
July 11, 2002
is higher than in the other four areas of the citrus belt.
Certifications through February 3, 2002, total 4.2 million boxes of Navels and 94.9 million boxes of early and midseason oranges. These figures do not include the USDA's allowance for non-certified and gift fruit usage.

## VALENCIAS REMAIN 100.0 MILLION BOXES

The Valencia orange forecast is unchanged at 100.0 million boxes. Harvest has just begun with total certifications around 76,000 boxes. With so few boxes certified and a similarly low number of rows harvested, the Row Count survey was not used as an indicator.

Current fruit size and growth rate surveys support the below average projection which is smaller than the final size in nine of the ten previous seasons. With the current projection, the estimated fruit per box differs from last season by less than one piece per box.

Offsetting the small size is the higher fruit per tree this season and the relatively low loss from droppage. Based upon objective survey data, it is anticipated that loss from droppage will be below the level of seven of the previous ten seasons.

## FCOJ CONTINUED AT 1.58 GALLONS

The FCOJ yield for all oranges is continued from last month at 1.58 gallons per box of 42.0 degrees Brix concentrate. The early and midseason portion remains at 1.52 gallons per box and the late (Valencia) portion is continued at 1.68 gallons per box.

If realized, the all orange yield will be the same as last season and above the 1999-00 season. However, it is below the record of 1.63 gallons per box recorded in the 1998-99 season.

The Florida Citrus Processors report \#17 (through January 26, 2002) shows over 58 million boxes have gone into FCOJ this season at an average yield of 1.48 gallons per box. Current weekly yields are almost 1.60 gallons.

All projections of yield assume that processing relationships remain consistent with prior seasons.

## GRAPEFRUIT HELD AT 47.0 MILLION BOXES

The forecast of all varieties of grapefruit for recorded utilization stays at 47.0 million boxes (including a preseason allocation of 1.5 million boxes of gift fruit and other use). The forecast continues to be divided into 19 million boxes of total white grapefruit and 28 million boxes of all varieties of colored grapefruit. If the forecast is realized, it will be two percent more than recorded last season, 12 percent below the 53.4 million boxes in 1999-00, and at the level of the 1998-99 season's crop.

In 1999 the Citrus Crop Estimates Advisory Committee requested that, in any season that economic abandonment is anticipated, an estimate of total available production would be reported in the October forecast. Early season survey data indicated that there was a potential for 3.0 million boxes of colored grapefruit that might not be harvested for economic reasons. The current forecast now assumes full utilization.

The January surveys show fruit size and loss from droppage continuing to follow the levels projected in December. The average fruit size for white grapefruit is at the smallest average of the 10 season series and the loss factor is at the series average. The average fruit size for colored grapefruit is actually smaller than the smallest recorded size in the 10 season series and the droppage is slightly above the series average.

A route survey was conducted on January 30-31, 2002. This Row Count survey on grapefruit measures the "clean" harvested rows versus the recorded utilization through the last day of the survey. At February 1 in every season this survey is not considered a prime forecast indicator because of the amount of "spot picking" that has occurred. However,

Citrus production, February 1, 2002
forecasts by varieties and states, with comparisons

| Crop and State | Production |  | Forecast |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $1999-00$ | $2000-01$ | Jan 11, 2002 | Feb 8, 2002 |
| $---1,000$ boxes -- |  |  |  |  |
|  |  |  |  |  |
|  | $\mathbf{5 3 , 4 0 0}$ | $\mathbf{4 6 , 0 0 0}$ | $\mathbf{4 7 , 0 0 0}$ | $\mathbf{4 7 , 0 0 0}$ |
|  | $\mathbf{2 1 , 5 0 0}$ | $\mathbf{1 8 , 7 0 0}$ | $\mathbf{1 9 , 0 0 0}$ | $\mathbf{1 9 , 0 0 0}$ |
|  | $\mathbf{3 1 , 9 0 0}$ | $\mathbf{2 l}$ | $\mathbf{2 7 , 3 0 0}$ | $\mathbf{2 8 , 0 0 0}$ |
| Texas | 5,930 | $\mathbf{7 , 2 0 0}$ | 7,300 | 7,300 |
| Arizona | 450 | 250 | 200 | 200 |
| California | 7,200 | 6,500 | 6,200 | 6,200 |
| Total Grapefruit | 66,980 | 59,950 | 60,700 | 60,700 |


| Lemons: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| California | 19,000 | 22,700 | 22,000 | 22,000 |
| Arizona | 3,100 | 3,600 | 3,100 | 3,100 |
| Total Lemons | 22,100 | 26,300 | 25,100 | 25,100 |
| Limes: Florida | 600 | 250 | 150 | 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 | 30 | 30 |
| Tangerines: |  |  |  |  |
| FLORIDA-All | 7,000 | 5,600 | 6,400 | 6,400 |
| Early ${ }^{3 /}$ | 4,350 | 3,550 | 4,300 | 4,300 |
| Honey | 2,650 | 2,050 | 2,100 | 2,100 |
| California ${ }^{4 /}$ | 2,500 | 2,100 | 2,300 | 2,300 |
| Arizona ${ }^{4 /}$ | 850 | 650 | 650 | 650 |
| Total Tangerines | 10,350 | 8,350 | 9,350 | 9,350 |

${ }^{1 /}$ Includes seedy. ${ }^{2 /}$ Excludes two million boxes of economic abandonment. ${ }^{3 /}$ Robinson, Fallglo, Sunburst, and Dancy. ${ }^{4 /}$ Includes tangelos.
regression analysis of 10 seasons does indicate basic relationships of the two divisions if harvest patterns are reasonably consistent. Analysis of the results supports the forecast levels. The percent of rows harvested for white is well above the extremely small percent last season and in line with seven out of the 10 seasons. The harvest percent for colored is slightly ahead of last season but less than any other season.

Estimated utilization through February 3, 2002 showed white grapefruit at 3.7 million boxes as compared with 3.9 million boxes a year ago and colored grapefruit at 10.2 million boxes for both seasons. This equates to 20 percent of the white forecast and 38 percent of the colored forecast.

## ALL TANGERINES HELD AT 6.4 MILLION BOXES

The forecast of all varieties of tangerines is continued at 6.4 million boxes. This forecast indicates a 14 percent increase over last season's 5.6 million boxes. If realized, it will be nine percent less than the record high crop utilized in 1999-00.

The Early tangerine category is estimated at 4.3 million boxes. Estimated utilization is now at that level. Harvest is complete for the Robinson and Fallglo varieties in this category. Some recent certifications have been made for Sunburst, the major variety, and a few thousand boxes of the most minor variety, Dancy, once the predominate variety of Florida tangerines.

The Honey tangerine, the only later maturing variety, is forecast at 2.1 million boxes. The January fruit size and loss surveys show that the average fruit size has been exceeded in only two of the past 21 seasons, but that the loss from droppage, although slightly below the series average, has only been less in four seasons. Loss from droppage has varied from 21 to 62 percent in the series. Record low droppage of 21 percent was the main reason 2.650 million boxes were recorded in the 1999-00 season. Fewer pieces of fruit per tree this season offset the large size and low droppage, resulting in a lower forecast. The Row Count survey conducted the end of January confirms the forecast level.

## TEMPLES REMAIN AT 1.4 MILLION BOXES

The Temple forecast is maintained at 1.4 million boxes. The January survey showed average fruit size smaller than all but two of the previous 36 non-freeze seasons. However, loss from droppage which was less in only five seasons of that series, somewhat offset the small average size. Last season's 1.250 million boxes was the least amount recorded historically. The Row Count survey, with less than 17 percent rows harvested, is not used as an indicator.

## TANGELOS HELD AT 2.3 MILLION BOXES

The continued 2.3 million box tangelo forecast is more than was utilized in each of the last two seasons. The February Row Count survey computes to more availability, however in recent years there have been some rows, especially pollinators, that have not been harvested.

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

| Fruit type (No. groves) test date | Acid |  | Solids(Brix) |  | Ratio |  | Unfinished juice per box |  | Solids per box |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000-01 | 2001-02 | 2000-01 | 2001-02 | 2000-01 | 2001-02 | 2000-01 | 2001-02 | 2000-01 | 2001-02 |

Juice and solids per box are unadjusted and not comparable to plant test results.
ORANGES:

| Early (44-26) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sep 1 | 1.65 | 1.45 | 9.75 | 9.50 | 6.03 | 6.81 | 42.10 | 44.17 | 4.11 | 4.20 |
| Oct 1 | 1.12 | 1.01 | 9.82 | 9.66 | 8.97 | 9.87 | 48.76 | 48.71 | 4.78 | 4.70 |
| Nov 1 | 1.00 | 0.83 | 10.70 | 10.42 | 11.11 | 12.92 | 51.58 | 52.91 | 5.51 | 5.51 |
| Dec $1^{1 /}$ | 0.90 | NA | 11.40 | NA | 13.05 | NA | 51.57 | NA | 5.87 | NA |
| Jan 1 | 0.82 | 0.69 | 12.07 | 11.77 | 15.02 | 17.45 | 50.40 | 51.16 | 6.07 | 6.02 |
| Feb 1 | 0.78 | 0.66 | 12.73 | 12.17 | 16.62 | 18.74 | 48.43 | 50.96 | 6.16 | 6.21 |
| Midseason (23-20) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | 1.76 | 1.66 | 9.25 | 9.46 | 5.32 | 5.80 | 44.66 | 44.10 | 4.14 | 4.17 |
| Oct 1 | 1.23 | 1.23 | 9.40 | 9.77 | 7.79 | 8.12 | 49.97 | 50.83 | 4.69 | 4.96 |
| Nov 1 | 1.07 | 1.02 | 10.37 | 10.73 | 9.97 | 10.71 | 53.12 | 52.79 | 5.51 | 5.66 |
| Dec $1^{1 /}$ | 0.95 | NA | 11.40 | NA | 12.19 | NA | 53.31 | NA | 6.08 | NA |
| Jan 1 | 0.90 | 0.82 | 12.11 | 12.61 | 13.86 | 15.69 | 52.52 | 52.02 | 6.36 | 6.56 |
| Feb 1 | 0.86 | 0.78 | 12.97 | 13.35 | 15.48 | 17.42 | 49.37 | 52.26 | 6.42 | 6.99 |
| Late (149-150) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Oct 1 | 2.44 | 2.19 | 8.79 | 8.87 | 3.65 | 4.11 | 46.56 | 47.72 | 4.09 | 4.23 |
| Nov 1 | 2.00 | 1.76 | 9.46 | 9.20 | 4.80 | 5.31 | 50.77 | 52.00 | 4.81 | 4.79 |
| Dec $1^{1 /}$ | 1.74 | NA | 10.36 | NA | 6.03 | NA | 52.14 | NA | 5.40 | NA |
| Jan 1 | 1.51 | 1.25 | 11.10 | 10.96 | 7.46 | 8.89 | 54.26 | 55.38 | 6.02 | 6.07 |
| Feb 1 | 1.40 | 1.12 | 11.86 | 11.71 | 8.57 | 10.62 | 53.59 | 55.50 | 6.36 | 6.50 |

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 nor restrictions are used.
${ }^{1 /}$ December 1, 2001, data not available due to testing equipment malfunction.

Maturity test averages by areas, February 1, 2002

| Fruit type | Groves sampled | Acid | Solids (Brix) | Ratio | Unfinished juice per box | Solids per box |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Percent |  | Pounds | Pounds |
| ORANGES: |  |  |  |  |  |  |
| Early |  |  |  |  |  |  |
| Indian River Dist. | 2 | 0.70 | 12.88 | 18.40 | 51.39 | 6.64 |
| Other Areas | 24 | 0.66 | 12.11 | 18.77 | 50.92 | 6.18 |
| Midseason |  |  |  |  |  |  |
| Indian River Dist. | 4 | 0.75 | 12.98 | 17.34 | 52.54 | 6.81 |
| Other Areas | 16 | 0.79 | 13.44 | 17.45 | 52.19 | 7.03 |
| Late |  |  |  |  |  |  |
| Indian River Dist. | 25 | 1.13 | 11.86 | 10.60 | 56.06 | 6.67 |
| Other Areas | 125 | 1.12 | 11.67 | 10.62 | 55.39 | 6.47 |

Size frequency distributions from the January size survey are shown in the table below. The distributions are by percent of fruit falling within the size range of each $4 / 5$-bushel container. Fruit sizes were measured on trees in sample groves during the period January 14 through 29, 2002. Comparable sizes for 2000 and 2001 are also shown. These measurements are of fruit from spring bloom and exclude summer bloom in all seasons.

FLORIDA CITRUS: Size frequency distributions from January measurements

| Type of fruit and size <br> in 4/5-bushel containers 2000 2001 2002 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | -- - Percent--- |  |  |
| Valencia oranges: |  |  |  |
| 64 and larger | 9.4 | 2.8 | 5.7 |
| 80 | 27.6 | 16.0 | 22.5 |
| 100 | 37.2 | 40.0 | 39.4 |
| 125 | 20.0 | 31.8 | 23.3 |
| 163 and smaller | 5.8 | 9.4 | 9.1 |
| White seedless grapefruit: |  |  |  |
| 32 and larger | 20.9 | 16.0 | 13.1 |
| 36 | 21.7 | 21.4 | 17.6 |
| 40 | 20.6 | 22.1 | 22.1 |
| 48 | 16.4 | 17.9 | 20.3 |
| 56 | 7.9 | 10.3 | 12.6 |
| 63 and smaller | 12.5 | 12.3 | 14.3 |
| Colored seedless grapefruit: |  |  |  |
| 32 and larger | 9.8 | 6.8 | 5.7 |
| 36 | 18.6 | 14.9 | 13.1 |
| 40 | 22.7 | 24.5 | 20.7 |
| 48 | 20.4 | 22.9 | 23.5 |
| 56 | 13.4 | 13.7 | 14.7 |
| 63 and smaller | 15.1 | 17.2 | 22.3 |
| Temples: |  |  |  |
| 80 and larger | 38.4 | 31.4 | 27.0 |
| 100 | 33.9 | 40.0 | 40.5 |
| 120 | 21.0 | 23.0 | 23.9 |
| 156 and smaller | 6.7 | 5.6 | 8.6 |
| Honey tangerines: |  |  |  |
| 150 and larger | 91.1 | 84.6 | 94.1 |
| 176 | 5.0 | 8.0 | 3.9 |
| 210 | 2.6 | 5.7 | 1.9 |
| 246 | 0.6 | 1.7 | 0.1 |
| 294 and smaller | 0.7 | 0.0 | 0.0 |

The charts to the right compare the relationship of the January 2002. Valencia orange and white seedless grapefruit fruit size measurements with those taken in January 2001. The diameter measurements shown are the minimum values of each eighth inch range except for the smallest value.

CHART 1: Valencia orange size frequency by diameter from January measurements.


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


