

CITRUS october forecast <u>maturity test results and fruit size</u>

ORANGES 240.0 MILLION BOXES

The 2000-01 Florida orange forecast (excluding Temples) released today by the USDA Agricultural Statistics Board is 240.0 million boxes. This forecast is three percent larger than the 233.0 million boxes recorded as final production last season. However, it is still below the record Florida orange crop of 244.0 million boxes utilized in the 1997-98 season. The two forecast categories are: early and midseason oranges at 135.0 million boxes (including 5.5 million boxes of Navels) and late type (Valencia) at 105.0 million boxes. All forecasts are based entirely on tree counts, fruit counts and fruit measurements made by the Florida Agricultural Statistics Service. These project the quantity of fruit utilized in certified fresh and processed form, including about one percent for non-recorded use. Historically, there has been no measurable volume of usable oranges that has been left unharvested.

The October all orange forecasts during the past 10 seasons have differed from the final recorded utilization by an average of 3.7 percent. The range has been between 0.3 percent in 1992-93 and 9.4 percent in 1999-00. Three out of the 10 seasons' October forecasts have been more than the final and seven below.

There was no freezing weather last winter to cause adverse effects on this season's crop. Winter and spring weather was exceptionally dry throughout the citrus area. This

forecasts	forecasts by varieties and states, with comparisons					
Crop and State		Production				
	1997-98	1998-99	1999-00	2000-01		
Early, Midseason, and Navel Oranges:		1,000) boxes			
FLORIDA California Texas Arizona	140,000 44,000 1,350 350	112,000 21,000 1,250 550	134,000 40,000 1,540 600	135,000 34,000 1,800 550		
Total Above Varieties	185,700	134,800	176,140	171,350		
Valencias:						
FLORIDA California Texas Arizona	104,000 25,000 175 650	74,000 15,000 180 600	99,000 27,000 200 500	105,000 25,000 200 500		
Total Valencias	129,825	89,780	126,700	130,700		
All Oranges: FLORIDA California	244,000 69,000	186,000 36,000	233,000 67,000	240,000 59,000		
Texas Arizona	1,525 1,000	1,430 1,150	1,740 1,100	2,000 1,050		
Total All Oranges	315,525	224,580	302,840	302,050		

Citrus production, October 1, 2000 precasts by varieties and states, with comparisons



October 12, 2000

FORECAST DATES 2000-01 SEASON

November 9, 2000

December 12, 2000

caused tree stress in certain groves where irrigation water was limited. However, most groves were kept in good condition with extensive use of irrigation. Summer rains varied by location but overall were sufficient to provide adequate moisture for the fruit. Except in a few groves, there was not the amount of late and "non-regular" bloom fruit that was found throughout the citrus area last season. Most occurred in groves that were under stress at normal bloom time.

The data collection and sampling procedures used in all forecasts are identical with past seasons. These are described on page six of this report.

Bearing trees include 1997 plantings (three years at bloom time) as shown in the 2000 Commercial Citrus Inventory, updated by one season of attrition. This season, 79.6 million trees are used to expand the objective count data, up only one percent from the trees producing last season's crop.

The average fruit per tree, as computed from the summer objective fruit count survey is up 6.4 percent from last season. The state average of later blooms included in the forecast was less than two percent this season, as compared with about four percent last season. All fruit having a diameter of 11/16 inch at count time is included in the forecast.

The youngest tree age group (3 to 5 years) now accounts for only 2.5 percent of the total fruit population (trees X fruit per tree). The main contribution, about 40 percent, is coming from the 1987 through 1991 plant dates. The oldest plant date (pre-1977) contributes 24 percent to the total fruit population.

FCOJ YIELD 1.55 GALLONS PER BOX

The all orange FCOJ yield projection is 1.55 gallons per box of 42 degrees Brix concentrate. This is virtually the same as last season's final yield of 1.547702 gallons per box as reported by the Florida Citrus Processors Association. Final yield for 1998-99 was 1.63381 and for 1997-98 was 1.577308. A separate projection for fruit going into the early-midseason category and for Valencias will be made in the January release.

All projections of yield assume processing relationships of the past several seasons. Results of the latest maturity testing with comparisons are found on pages three and four.

EARLY AND MIDSEASON 135.0 MILLION BOXES

The early and midseason orange forecast (including Navels) is 135.0 million boxes. The forecast is less than one percent more than last season's utilization of 134.0 million boxes but 3.6 percent less than the record 140.0 million boxes in 1997-98.

Excluding Navels, 35.7 million trees are used to make this forecast. The average fruit per tree (weighted by a 25 cell age/area matrix) is 8.6 percent more than last year. Less than two percent of the fruit used for the forecast is "non-regular" bloom. The early portion (mostly Hamlin variety) contributed 83 percent to the total fruit population. The Western producing area had the largest average fruit per tree with the Western and Southern areas combined contributing almost 63 percent to the fruit population. The table on page three shows these distributions by age of tree and areas of the state.

Average fruit size in September (measured in spherical cubic inches) is 11 percent smaller than a year ago and 13 percent below the 10 season average. Growth rates between August and September have been at the mean gain. It is projected that it will take 13 more fruit than last season to make a 90 pound equivalent box at harvest. Loss from fruit droppage to harvest is projected at last season's level. This is about two percent below the 10 season mean. Droppage from the tree is the only loss factor used and is relative to other seasons for analysis. The loss factor can vary with subsequent weather conditions and harvest patterns.

NAVEL ORANGES 5.5 MILLION BOXES

The Navel orange forecast of 5.5 million boxes is two percent more than was utilized last season (including less than one million boxes of gift fruit shipments and other none certified use). The record crop was 6.4 million boxes in 1996-97 followed by 6.3 million boxes in 1997-98. Bearing tree numbers are down almost four percent but the average fruit per tree is up over 10 percent, however this is still 19 fruit per tree below the past 10 season average. This variety usually has less later bloom fruit in the forecast. Less than two fruit per tree were of a later nature.

Because of significant differences in fruit set, size, drop and harvest patterns of this variety from other oranges, a separate expansion is used as an add-on indicator in the early-midseason and all orange forecast.

VALENCIAS 105.0 MILLION BOXES

The 105.0 million box late type orange (Valencia) forecast indicates a record large crop, surpassing the 104.0 million boxes in 1997-98 by only one percent. It is six percent more than the 99.0 million boxes utilized last season and 41 percent above the 73.7 million boxes certified in 1998-99.

The 41.1 million trees used in the forecast is three percent more than used in last season's forecast. The average fruit per tree is up 4.5 percent. Later blooms constitute less than two percent of the fruit used in the forecast.

The count survey indicates that the Southern area constitutes 38 percent of the total fruit population. The age category that includes the plant dates of 1986 through 1990 had the largest fruit population on a statewide basis.

The September fruit size (in cubic inches of all the "regular" bloom fruit) is about 6.5 percent smaller than last season. It is almost eight percent below the 10 season average. However the growth rate between August and September was greater than average and it is projected that it will take only one more fruit to make the 90 pound box equivalent at harvest than last season.

Loss from droppage is projected to be close to the minimum seasonal level, the same as last season. Loss through the September survey was the smallest in the 10 season series. The average recorded loss from the sample trees has been declining in most years because of the use of irrigation to maintain a more even level of moisture. The loss factor can greatly impact the final outcome of this crop that is not harvested until late spring.

TEMPLES 1.8 MILLION BOXES

The Temple forecast of 1.8 million boxes is over seven percent less than the 1.95 million boxes recorded last season. The forecast is the same as was utilized in 1998-99. Bearing trees declined almost two percent and the average fruit per tree is down over 13 percent from last season. Later and non-regular blooms of this variety always occur and the quantity in this forecast is close to last season. However, there is a much greater percent of true June or later bloom that is not in the forecast this season. This fruit was "pinhead" to pencil eraser size during the count period and historically does not produce usable fruit. Projected loss from droppage is two percent less and fruit size is about two percent larger. Last season over 77 percent of the total recorded crop went into processed use.

TANGELOS 2.1 MILLION BOXES

The 2.1 million box forecast is down 0.1 million boxes, or almost five percent from the recorded utilization of last season. This forecast indicates the smallest tangelo crop since the 1968-69 season. Bearing trees continue to decrease and are estimated to be down over three percent from last season. The average fruit per tree is within one fruit per tree from last season. Loss from droppage is projected to be identical with last year. Later bloom fruit included in the forecast total only eight fruit per tree as compared with 30 last season. However, the average size at harvest is projected to be less than the 10 year average and well below last season's size. Over 66 percent of the crop was used in processed form last season.

K-EARLY CITRUS 60,000 BOXES

The K-Early Citrus Fruit forecast of 60.000 boxes is over 45 percent less than recorded last season and 25 percent below 1998-99. However, it is 50 percent more than the small crop of 1997-98. Trees continue to decrease and no new plantings are being made. Harvest is dependent almost entirely on processed use.

Expected gift fruit shipments under the 6-R program,
and non-certified usage, 2000-01 season

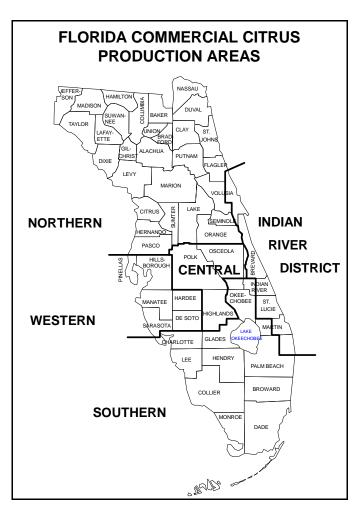
Туре	1,000 boxes
Early and Midseason Oranges	2,000
Valencia Oranges	1,000
White Grapefruit	500
Colored Grapefruit	1,000
Temples	100
Tangelos	200
Tangerines	300
K-Early Citrus Fruit	5

Florida Citrus:	Distribution of estimated fruit population in
Septe	mber by areas and age groups ^{1/}

Sep	otember by a	ieas anu ay	e groups		
Areas	Oranges				
and	Early - Mi	dseason	Valencia		
age groups	1999-00	2000-01	1999-00	2000-01	
		Pei	rcent		
Indian River					
District	8	6	14	12	
Northern	7	7	3	2	
Central	26	24	28	27	
Western	32	32	22	21	
Southern	27	31	33	38	
0 5		0	0		
3 - 5 years	1	2	3	4	
6 - 8 years	13	8	16	13	
9 - 13 years	35	37	36	41	
14 - 23 years	24 27	28 25	16 29	18 24	
24 yrs & over	21	20	29	24	
		Coodlooo	Cronofruit		
Areas			Grapefruit	arad	
Areas and	Wh	ite	Col	ored	
Areas	Wh 1999-00	ite 2000-01	Col 1999-00	ored 2000-01	
Areas and age groups		ite 2000-01	Col		
Areas and age groups Indian River	1999-00	ite 2000-01 Per	Col 1999-00 rcent	2000-01	
Areas and age groups Indian River District		ite 2000-01	Col 1999-00 rcent 67	2000-01 66	
Areas and age groups Indian River District Northern	1999-00 74 2/	ite 2000-01 Per 72 2/	Col 1999-00 rcent 67 1	2000-01 66	
Areas and age groups Indian River District Northern Central	1999-00 74 2/ 8	ite 2000-01 Per 72 2/ 11	Col 1999-00 rcent 67 1 8	2000-01 66	
Areas and age groups Indian River District Northern Central Western	1999-00 74 ^{2/} 8 3	ite 2000-01 Pei 72 2/ 11 3	Col 1999-00 rcent 67 1 8 3	2000-01 66	
Areas and age groups Indian River District Northern Central	1999-00 74 2/ 8	ite 2000-01 Per 72 2/ 11	Col 1999-00 rcent 67 1 8	2000-01	
Areas and age groups Indian River District Northern Central Western	1999-00 74 ^{2/} 8 3	ite 2000-01 Pei 72 2/ 11 3	Col 1999-00 rcent 67 1 8 3	2000-01 66	
Areas and age groups Indian River District Northern Central Western Southern	1999-00 74 2/ 8 3 15	ite 2000-01 Per 72 2/ 11 3 14	Col 1999-00 rcent 67 1 8 3 21	2000-01 66 2 7 3 22	
Areas and age groups Indian River District Northern Central Western Southern 3 - 5 years 6 - 8 years 9 - 13 years	1999-00 74 2/ 8 3 15 3	ite 2000-01 Per 72 2/ 11 3 14 4	Col 1999-00 rcent 67 1 8 3 21 21 2	2000-01 66 2 7 3 22 2	
Areas and age groups Indian River District Northern Central Western Southern 3 - 5 years 6 - 8 years 9 - 13 years 14 - 23 years	1999-00 74 2/ 8 3 15 3 11 22 6	ite 2000-01 Per 72 2/ 11 3 14 4 9 25 7	Col 1999-00 rcent 67 1 8 3 21 2 19 31 24	2000-01 66 2 7 3 22 2 14 36 24	
Areas and age groups Indian River District Northern Central Western Southern 3 - 5 years 6 - 8 years 9 - 13 years	1999-00 74 2/ 8 3 15 3 11 22 6 58	ite 2000-01 Per 72 2/ 11 3 14 4 9 25 7 55	Col 1999-00 rcent 67 1 8 3 21 2 19 31 24 24 24	2000-01 66 2 7 3 22 2 14 36 24 24	

average fruit per tree from the Limb Count Survey by bearing age trees. ^{2/} Less

than one percent.



Unadjusted Maturity Tests: Average of regular bloom fruit from sample groves, 1999-00 and 2000-01 seasons

Fruit type	Aci	d	Soli		Rat		Unfinishe	ed juice	Sol	ds
(No. groves)	Aci	u	(Bri	x)	Na	10	per b	хох	per	хос
test date	1999-00	2000-01	1999-00	2000-01	1999-00	2000-01	1999-00	2000-01	1999-00	2000-01
	Perce		Perc		-	-	Pour		Pou	nds
ORANGES: Early (120-120) Sep 1	1.73	1.63	9.35	9.78	5.53	and not com 6.11	41.09	42.44	3.83	4.14
Oct 1	1.20	1.10	9.36	9.85	7.94	9.13	46.51	48.63	4.35	4.78
Mid (55-55) Sep 1 Oct 1	1.99 1.41	1.77 1.22	9.13 9.10	9.32 9.47	4.69 6.57	5.35 7.94	39.47 46.89	44.22 49.78	3.60 4.27	4.13 4.71
Late (150-150) Sep 1 Oct 1	NA 2.51	NA 2.45	NA 8.55	NA 8.80	NA 3.45	NA 3.65	NA 43.36	NA 46.50	NA 3.71	NA 4.09
GRAPEFRUIT: White Seedless (49-50 Sep 1 Oct 1	0) 1.84 1.62	1.82 1.58	10.28 9.81	10.14 10.23	5.61 6.11	5.58 6.49	29.07 34.56	32.47 36.64	2.98 3.38	3.29 3.74
Colored Seedless (48- Sep 1 Oct 1	48) 1.75 1.55	1.76 1.51	10.10 9.73	10.39 10.45	5.79 6.33	5.92 6.96	28.81 35.31	33.58 37.18	2.91 3.44	3.49 3.88

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.

Fruit type Groves sampled Acid Solids (Brix) Ratio Unfinished juice per box Solids per box Number Percent Percent Percent Pounds Pounds 1992 115 1.10 9.25 8.61 47.79 4.42 1993 115 1.33 9.73 7.53 46.78 4.55 1994 120 0.93 9.53 10.49 49.78 4.74 1995 120 1.03 9.30 9.25 50.50 4.70 1996 120 1.14 9.85 8.84 48.14 4.74 1997 120 0.99 9.80 10.17 47.27 4.63 1998 120 1.10 9.85 9.13 48.63 4.78 Midseason 1992 55 1.62 9.36 5.95 46.49 4.35 1994 55 1.19 9.23 7.97 51.08 4.71 1995 55 1.	from san	from sample groves, by types, as of October 1, 1992 through 2000						
type sampled (BRX) juice per box per box Number Percent Percent Pounds Pounds Pounds 1992 115 1.10 9.25 8.61 47.79 4.42 1993 115 1.33 9.73 7.53 46.78 4.55 1994 120 0.93 9.53 10.49 49.78 4.74 1995 120 1.03 9.30 9.25 50.50 4.70 1996 120 1.14 9.85 8.84 48.14 4.74 1997 120 0.99 9.80 10.17 47.27 4.63 1998 120 1.14 9.85 8.84 48.14 4.74 1999 120 1.20 9.36 7.94 46.51 4.35 2000 120 1.10 9.85 9.13 48.63 4.78 Midseason 1992 55 1.24 9.20 7.59 51.82	Fruit	Groves	Acid		Patio	Unfinished	Solids	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	type			(Brix)	Natio	juice per box	per box	
Early19921151.109.258.6147.794.4219931151.339.737.5346.784.5519941200.939.5310.4949.784.7419951201.039.309.2550.504.7019961201.149.858.8448.144.7419971200.999.8010.1747.274.6319981201.149.388.3447.884.4919991201.209.367.9446.514.3520001201.109.859.1348.634.78Midseason1992551.389.066.7649.124.451993551.629.365.9546.494.351994551.199.237.9751.084.711995551.249.207.5951.824.771996551.409.767.0748.954.781997541.149.438.4750.054.721998551.309.147.1948.254.411999551.419.106.5746.894.272000551.229.477.9449.784.7119951502.458.503.5146.163.9219931452.698.963.3844.814.01<		Number	Percent	Percent		Pounds	Pounds	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ORANGES:							
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Early							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1992					47.79	4.42	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1993	115				46.78		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1994					49.78	4.74	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1995	120	1.03	9.30	9.25	50.50	4.70	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1996	120	1.14	9.85	8.84	48.14	4.74	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1997	-	0.99		10.17	47.27	4.63	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1998		1.14			47.88	4.49	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1999	120			7.94	46.51	4.35	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2000	120	1.10	9.85	9.13	48.63	4.78	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Midseason							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1992	55	1.38	9.06	6.76	49.12	4.45	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1993	55	1.62	9.36	5.95	46.49	4.35	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1994		1.19	9.23	7.97	51.08	4.71	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1995	55	1.24	9.20	7.59	51.82	4.77	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					7.07	48.95	4.78	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						50.05	4.72	
2000 55 1.22 9.47 7.94 49.78 4.71 Late 1992 145 2.45 8.50 3.51 46.16 3.92 1993 145 2.69 8.96 3.38 44.81 4.01 1994 150 2.19 8.69 4.05 48.84 4.25 1995 150 2.39 8.60 3.65 47.68 4.10 1996 150 2.40 8.93 3.76 46.08 4.11 1997 150 2.10 8.84 4.30 47.87 4.23 1998 150 2.44 8.65 3.60 45.68 3.95 1999 150 2.51 8.55 3.45 43.36 3.71	1998		1.30			48.25	4.41	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1999		1.41			46.89	4.27	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2000	55	1.22	9.47	7.94	49.78	4.71	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Late							
19941502.198.694.0548.844.2519951502.398.603.6547.684.1019961502.408.933.7646.084.1119971502.108.844.3047.874.2319981502.448.653.6045.683.9519991502.518.553.4543.363.71	1992	145	2.45	8.50	3.51	46.16	3.92	
19951502.398.603.6547.684.1019961502.408.933.7646.084.1119971502.108.844.3047.874.2319981502.448.653.6045.683.9519991502.518.553.4543.363.71	1993	145	2.69	8.96	3.38	44.81	4.01	
19961502.408.933.7646.084.1119971502.108.844.3047.874.2319981502.448.653.6045.683.9519991502.518.553.4543.363.71	1994	150	2.19	8.69	4.05	48.84	4.25	
19971502.108.844.3047.874.2319981502.448.653.6045.683.9519991502.518.553.4543.363.71	1995	150	2.39	8.60	3.65	47.68	4.10	
19971502.108.844.3047.874.2319981502.448.653.6045.683.9519991502.518.553.4543.363.71								
19981502.448.653.6045.683.9519991502.518.553.4543.363.71	1996				3.76	46.08	4.11	
1999 150 2.51 8.55 3.45 43.36 3.71	1997		2.10			47.87	4.23	
	1998	150			3.60	45.68	3.95	
2000 150 2.45 8.80 3.65 46.50 4.09								
	2000	150	2.45	8.80	3.65	46.50	4.09	

Unadjusted Maturity Tests: Averages of regular bloom fruit om sample groves, by types, as of October 1, 1992 through 200

MATURITY

These are the second maturity tests of the 2000-01 season for all but the late oranges, which are tested for the first time. The samples tested are from groves fronting routes which cover all five major citrus producing areas.

Sample sizes have remained constant for the past several seasons. The grapefruit sample size was 100 at the start of this season, which included 50 samples each for the white and colored types. All of the white samples remain, however, two of the colored samples were picked by the time of the current survey. None of the 325 orange samples had been harvested yet.

These samples were collected October 2-3, and tested October 4-5 in the Orlando test laboratory of the Florida Agricultural Statistics Service. Only regular bloom fruit was tested. Only a minimal or insignificant amount of late or off bloom has occurred this season.

Rainfall during the summer months was near or below normal for most citrus producing counties. However, rainfall in September was generally above average. A tropical depression October 2-4 dumped up to 10 inches of rain on the southern part of the citrus belt. A lot of the run-off or excessive water accumulated in lakes and canals for future use.

Maturity levels are ahead of the past two seasons for midseason and late oranges. Early oranges have the highest pounds solids per box for October 1 since the 1990-91 season. Juice per box is the highest in five seasons for early and midseasons. Both white and colored grapefruit pounds solids are ahead of last year but behind the previous two years. Juice per box is higher than the previous two seasons.

Fresh fruit packing houses have been shipping both white and colored grapefruit since the second week of September. Most of this fruit has been harvested in the southern production area.

Maturity test averages by areas, October 1, 2000

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.	11	1.16	10.37	9.08	46.45	4.81
Other Areas	109	1.09	9.80	9.13	48.85	4.78
Midseason						
Indian River Dist.	11	1.18	9.61	8.25	49.07	4.71
Other Areas	44	1.22	9.44	7.86	49.96	4.71
Late						
Indian River Dist.	25	2.55	9.13	3.63	45.25	4.13
Other Areas	125	2.43	8.74	3.65	46.75	4.08
GRAPEFRUIT:						
White Seedless						
Indian River Dist.	35	1.63	10.49	6.48	35.72	3.74
Other Areas	15	1.48	9.60	6.53	38.79	3.72
Colored Seedless						
Indian River Dist.	39	1.53	10.58	6.94	37.23	3.93
Other Areas	9	1.43	9.91	7.00	36.99	3.67

ALL GRAPEFRUIT 50.0 MILLION BOXES

The total Florida grapefruit crop is forecast at 50.0 million boxes, six percent less than last season's recorded utilization of 53.4 million boxes. If realized, this crop will be 5.8 million boxes below the record crop of the 1996-97 season. Economic abandonment is not anticipated this season. The total is divided into 20.0 million boxes of white (including seedless and seedy varieties) and 30.0 million boxes of all varieties of colored.

Grapefruit:	1999-00 production and a proration of the
2000-01 forecasts	based on fruit populations, by production areas ^{1/}

Production Area	1999	9-00	2000	0-01
T TOULCIION AIEa	White	Colored	White	Colored
		Million	boxes	
Indian River	14,400	20,400	14,100	19,800
Southern	3,500	6,500	2,700	6,600
Other	3,600	5,000	3,200	3,600

^{1/} The possible differences between growing areas, concerning average fruit size, loss from droppage and harvest patterns, can alter the prorated estimates.

The white forecast of 20.0 million boxes includes the seedy (Duncan) variety. Seedy bearing tree numbers are down 10 percent from last season as estimated from the most recent tree census conducted in 2000 and released August 31. In recent seasons, recorded utilization has declined to near 500,000 boxes, all processed. Because of the continued decline in bearing tree numbers and the low level of production, objective surveys were not conducted on this variety this season.

Citrus production, October 1, 2000
forecasts by varieties and states, with comparison

forecasts by varieties and states, with comparisons						
Crop and State	Production			Forecast		
orop and otate	1997-98	1998-99	1999-00	2000-01		
Grapefruit:		1,000	boxes			
FLORIDA-All White ^{2/} Colored Texas	^{1/} 49,550 18,950 30,600 4,800	47,050 18,350 28,700 6,100	53,400 21,500 31,900 5,930	50,000 20,000 30,000 6,500		
Arizona California	800 8,000	750 7,300	500 7,000	600 7,200		
Total Grapefruit	63,150	61,200	66,830	64,300		
Lemons:						
California Arizona	21,000 2,600	16,200 3,450	19,600 3,100	21,000 3,600		
Total Lemons	23,600	19,650	22,700	24,600		
Limes: Florida	440	500	600	250		
Temples: Florida	2,250	1,800	1,950	1,800		
Tangelos: Florida	2,850	2,550	2,200	2,100		
K-Early: Florida	40	80	110	60		
Tangerines:						
FLORIDA-All Early ^{3/} Honey California ^{4/} Arizona ^{4/}	5,200 3,200 2,000 2,400 600	4,950 3,050 1,900 1,500 950	7,000 4,350 2,650 2,300 850	6,300 3,700 2,600 2,000 850		
Total Tangerines	8,200	7,400	10,150	9,150		

^{1/} Excludes six million boxes of economic abandonment: five million white seedless and one million colored. ^{2/} Includes seedy. ^{3/} Robinson, Fallglo, Sunburst, and Dancy. ^{4/} Includes tangelos. White seedless bearing trees used in this forecast are estimated to have declined by almost six percent from those producing last season's crop. The fruit per tree average from the Limb Count Survey is almost identical to last season. However, fruit from the February-May regular bloom time period increased by almost 15 percent over last season which had the most summer bloom fruit in many seasons. The projected fruit size and loss from droppage are both near last season's levels. This forecast is seven percent below last season's final and above the two preceding seasons. If realized, this crop will be 18 percent below the 24.4 million boxes recorded in 1996-97.

The colored varieties forecast is six percent less than the record crop of 31.9 millions boxes last season. Bearing trees are estimated to be almost four percent less than last season, however, the average pieces of fruit per tree is up by over 10 percent. Last season, 13 percent of the fruit in the forecast was of a late or non-regular bloom, which provided availability late in the season for a record processed use. This season, less than three percent of fruit in the forecast is in the later bloom category. Fruit size is projected to be at last season's level but loss from fruit droppage is expected to be about four percent less.

ALL TANGERINES 6.3 MILLION BOXES

The forecast for all varieties of tangerines is 6.3 million boxes, 10 percent less than the record use of 7.0 million boxes last season. The forecast is the same as was recorded in 1996-97 and the second largest of record. The varietal contributions to the total have changed over the years.

Two divisions comprise the total tangerine forecast: **Early** at 3.7 million boxes and **Honey** at 2.6 million boxes. The Early category is comprised of four varieties: **Sunburst**, the predominate variety at almost 70 percent of the total; **Fallglo** at about 20 percent; and **Robinson** and **Dancy** varieties, which in recent seasons have contributed less than 10 percent combined.The Robinsons and Dancys have declined to a level where it is no longer useful to conduct objective count surveys.

Sunburst trees decreased almost two percent from those used in last season's expansions. The average fruit per tree is down over 16 percent. There is considerable variability in the fruit set with some groves without pollinators almost devoid of fruit. Loss from fruit droppage is at the level of last season, as is the projected fruit size.

Fallglo trees also declined over three percent and the fruit per tree is down 18 percent. Fruit is expected to be much larger than last season and projected to require about 20 less fruit to make a 4/5 bushel carton.

Honey tangerines, the later maturing variety, is forecast at 2.6 million boxes, only two percent less than last season's final estimate of production. Bearing trees are up over two percent but average fruit per tree is down over one percent. Fruit size is projected to take about seven less fruit to make a 4/5 bushel carton. Last season, loss from fruit drop was at a record low level for this type of fruit. The range of loss from mid-August to mid-January is from 21 to 62 percent. Loss this season is projected to be closer to the mean.

LIMES 400,000 BUSHELS

The 2000-01 lime crop, first forecast in April 2000, is continued at 400,000 bushels (250,000 boxes). This is less than half of the 960,000 bushels (600,000 boxes) utilized last season. Only about one-third of the lime trees in Dade County remain since those exposed to Xanthomonas (citrus canker) have been destroyed. Continuing surveys for the disease may result in loss of more trees and may affect the total crop utilization.

FORECAST PROCEDURES FOR THE 2000-01 SEASON

All citrus forecasts except seedy grapefruit, Robinson and Dancy tangerines, limes, and K-Early Citrus Fruit are based on actual fruit counts and measurements. These objective count methods utilize: (1) the bearing age tree population provided from the latest aerial photography with field verifications, (2) the average fruit per tree obtained from the fruit count survey using randomly selected trees and limbs, and (3) the fruit measurement and fruit drop count surveys to determine fruit sizes and loss from fruit droppage.

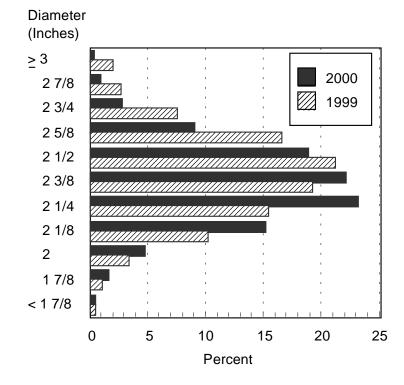
The latest Commercial Citrus Inventory is the base used to determine forecast tree numbers for this season. All trees planted in 1997 and earlier are included. An attrition factor by age and area was applied to these base numbers to account for tree losses since the inventory period.

The same unbiased fruit count procedures were used as in all of the past 43 seasons. These include drawing the sample with known probabilities from the Commercial Citrus Inventory based on analyses of the variability in fruit per tree. Using random path procedures, count limbs on sample trees are preselected to improve accuracy. Fruit on these limbs are counted in the mid-July to mid-September period.

Fruit size surveys were conducted in August and September. The fruit loss surveys (drop count) were begun in August. These surveys, along with historical records, were used to project the fruit size at harvest and the fruit population that is expected to remain on trees at harvest.

The chart below describes the relationship of the September 2000 early and midseason orange (excluding Navels) fruit size measurements with those taken in September 1999. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

Fruit Size: Early and midseason oranges (excluding Navels) size frequency by diameter from September measurements.



Size frequency distributions developed from the September 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 September measurements

from September measurements			
Type of fruit and size	1998	1999	2000
in 4/5-bushel containers			
	Percent		
Early and midseason oranges:			
(excluding Navels)			
64 and larger	0.2	0.3	0.1
80	1.1	2.9	0.6
100	7.6	14.5	6.4
125	29.1	32.4	25.3
163 and smaller	62.0	49.9	67.6
Navel oranges:			
64 and larger	14.2	26.6	14.4
80	27.2	35.1	30.9
100	30.8	23.5	33.2
125	17.9	9.6	15.1
163 and smaller	9.9	5.2	6.4
Valencia oranges:			
64 and larger	0.3	0.2	0.0
80	1.1	2.7	0.5
100	8.2	14.5	5.9
125	27.6	29.0	26.3
163 and smaller	62.8	53.6	67.3
White seedless grapefruit:			
32 and larger	2.0	1.8	2.4
36	5.1	6.9	5.0
40	12.1	10.1	8.4
48	17.2	15.2	15.7
56	16.7	12.5	14.2
63 and smaller	46.9	53.5	54.3
Colored seedless grapefruit:			
32 and larger	1.6	2.2	1.0
36	4.7	4.2	2.8
40	10.9	8.3	6.2
48	16.9	13.7	13.4
56	16.1	12.6	14.4
63 and smaller	49.8	59.0	62.2
Fallglo tangerines:			
150 and larger	69.7	56.2	89.7
176	16.3	13.9	3.2
210	7.2	8.8	2.5
246	4.2	10.4	1.4
294 and smaller	2.6	10.7	3.2
Sunburst tangerines:			
150 and larger	6.9	13.7	9.9
176	6.3	8.9	9.9
210	10.9	12.8	21.5
246	20.7	15.1	17.7
294 and smaller	55.2	49.5	41.0
Tangelos:			
80 and larger	1.2	1.3	0.3
100	5.2	10.4	5.8
120	13.8	20.3	19.4
156 and smaller	79.8	68.0	74.5