



Florida Citrus Outlook 2023-24 Season

Prepared by:

Marisa L. Zansler, Ph.D.
Economic and Market Research Department
Florida Department of Citrus
Gainesville, Florida

For release to:

Florida Citrus Commission
Economic and Market Research Committee

October 25, 2023

Report no. EMRD-Outlook-2023/24-1

EMRD Working Papers are generally speeches and research reports to the Florida Citrus Commission and other industry organizations. The content focuses on research results and industry implications. Technical details of the analytical models are presented in other professional and EMRD publication outlets. EMRD wishes to acknowledge industry leaders and stakeholders for providing useful insight and guidance into the key components of this report.

**ECONOMIC AND MARKET RESEARCH DEPARTMENT
FLORIDA DEPARTMENT OF CITRUS**

Web Site: www.FloridaCitrus.org/grower/

Bartow Office: 605 East Main Street
P.O. Box 9010
Bartow, Florida 33831-9010 USA

Gainesville Office: 2125 McCarty Hall
P.O. Box 110249
University of Florida
Gainesville, Florida 32611-0249 USA

Telephone: 352-294-7691
E-Mail: mzansler@ufl.edu

Table of Contents

Introduction.....	3
Review of the 2022-23 Florida Citrus Season	4
Florida Orange Crop, Utilization and Movement	9
Florida.....	10
São Paulo	11
Mexico	11
Other U.S. Orange Production.....	12
Orange Juice Production and Availability	13
Florida Orange Juice Inventory and Movement	16
U.S. Orange Juice Supply, Disappearance and Retail Sales.....	18
Florida Fresh Orange Shipments, by Market.....	23
Florida Grapefruit Crop, Utilization and Movement	23
Florida Grapefruit Juice Inventory and Movement	24
U.S. Grapefruit Juice Supply, Disappearance, and Retail Sales.....	26
Fresh Grapefruit Shipments, by Market	29
Florida Specialty Crop and Utilization	30
Summary: Implications for the Florida Grower.....	31
References.....	34
TABLES	35

List of Tables

Table 1. Utilization of world oranges – Selected Countries.	36
Table 2. Utilization of Florida round oranges.....	37
Table 3. Comparative utilization of round oranges, Florida, São Paulo, and Mexico.....	38
Table 4. Comparative orange juice yields, Florida, Brazil, and Mexico.	39
Table 5. Comparative orange juice production, Florida, São Paulo, and Mexico.	40
Table 6. Total Florida, Brazil, and Mexico OJ availability	41
Table 7. Brazil orange juice exports to select regions.	42
Table 8. U.S. Imports orange juice, by origin and type.	43
Table 9. Total Florida forecasted OJ availability, movement, and carryover for 2023-24, and actual for 2021-22 and 2022-23.	44
Table 10. Florida FCOJ forecasted availability, movement, and carryover for 2023-24, and actual for 2020-21 to 2022-23.	45
Table 11. Florida SSOJ forecasted availability, movement, and carryover for 2023-24, and actual for 2020-21 to 2022-23.	46
Table 12. U.S. orange juice supply and disappearance.....	47
Table 13. Florida processor OJ receipts, movement, and inventory, by type.....	48
Table 14. Retail orange juice sales.	49
Table 15. Share of 100% orange juice sold on promotion with reported price, by type	50
Table 16. Destination markets for Florida certified fresh orange shipments.....	51
Table 17. Utilization of Florida grapefruit.....	52
Table 18. Florida FCGJ and SSGF availability, movement, and carryover for 2020-21, and actual for 2021-22 through 2022-23.....	53
Table 19. U.S. grapefruit juice production, supply, and disappearance.	54
Table 20. Retail grapefruit juice sales.....	55
Table 21. Share of 100% grapefruit juice sold on promotion with reported price, by type.	56
Table 22. Destination markets for Florida certified fresh grapefruit.	57
Table 23. Utilization of Florida fresh specialty.	58
Table 24. Destination markets for Florida certified fresh specialty shipments.	59

Florida Citrus Outlook

2023-24 Season

Introduction

This report provides supply, demand, and price projections of Florida citrus for the 2023-24 season. On Thursday, October 12, 2023, the USDA's National Agricultural Statistics Service (USDA/NASS) released the 2023-24 Citrus Production Forecast for the Florida citrus crop, by variety, which provides the baseline for these projections. This report examines the utilization of oranges, grapefruit, and specialty citrus, in accordance with industry trends. Projections include Florida orange juice (OJ) and grapefruit juice (GJ) pack, movement, and ending inventory, along with estimates of U.S. consumption and retail sales of OJ and GJ estimates. World OJ availability is presented, given its strong bearing on Florida's OJ situation. Fresh fruit movement projections are also included. Sensitivity analyses are provided to assess alternative scenarios for availability and movement, where appropriate.

The October citrus forecast for the 2023-24 Florida citrus season is 22.90 million boxes, an estimated 26.6% increase in total Florida citrus production of oranges, grapefruit, and tangerines compared to the 2022-23 season. The forecast for total U.S. citrus production for the 2023-24 season indicates production will increase overall by 4.9% with a total of 121.4 million boxes of oranges, grapefruit, lemons, and specialty citrus from California, Florida, Texas, and Arizona. Specifically, the October forecast projects 65.80 million boxes of oranges, 7.60 million boxes of grapefruit, and 23.50 million boxes of specialty tangerines and tangelos. The USDA forecast also anticipates California and Arizona will produce 24.5 million boxes of lemons in the 2023-24 season (USDA-NASS, 2023a).

The projections contained in this report rely on assumptions based on recent industry trends in production components, as well as trends in supply and demand for citrus products. Even a modest variation in these trends could substantially change forecast projections.¹

Review of the 2022-23 Florida Citrus Season

This section provides an overview of trends from the 2022-23 season that may impact the outlook for the 2023-24 season. The most significant events affecting the Florida 2022-23 citrus season are weather-related. The first event causing citrus damage was a freeze occurring over two days in late January 2022. Considerable grove acreage experienced freezing temperatures over long durations. The second significant event occurred when Hurricane Ian crossed through the majority of Florida's citrus producing regions on September 28, 2022.

At the start of the 2022-23 season, the Florida citrus industry, already on the path to recovery after a decade of production decline due to the detrimental effects of HLB, faced a setback with crop losses from the storm. This left many growers wrestling with the decision of whether to invest in future seasons. The October 2022 citrus forecast originally projected 30.7 million boxes, which would have been an estimated 32% decline in total Florida citrus production of oranges, grapefruit, and tangerines compared to the previous season a decrease of 2.84 million boxes over. Subsequent updates from USDA-NASS would reveal the true impact of these 2022 adverse weather events. The September 2023 preliminary production results for the 2022-23 Florida citrus season were 18.09 million boxes of Florida oranges, grapefruit, and tangerines, an estimated 60% decline in total citrus production compared to production in the 2021-22 season.

¹ USDA National Agricultural Statistics Service, Florida Field Office. "Citrus Production October Forecast" https://www.nass.usda.gov/Statistics_by_State/Florida/Publications/Citrus/; Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California and Texas-80, Florida-85; lemons-80; tangerines and mandarins in California-80, Florida-95.

The season ending USDA-NASS September 2023 estimate for the Florida round orange crop in the 2022-23 season, released on August 31, 2023, was 15.8 million boxes, a decline of 25.4 million boxes, or 61.5% less than the previous season's crop of 41.2 million boxes. In addition to considerable drop rates, the decline in production was associated with fewer bearing trees compared to the previous year along with fewer pieces of fruit per tree across all varieties. The early-midseason orange fruit drop rate, excluding navels, was 76% compared to a 39% drop rate during the 2021-22 season. The drop rate for navel oranges was 69% compared to a 28% drop rate during the 2021-22 season. The drop rate for Valencia oranges was 70%, higher than the already astounding 51% drop rate during the 2021-22 season and a 41% drop rate during the 2020-21 season (USDA-NASS, 2023b).

A reduced share of the overall Florida orange crop has been utilized by the processed sector in recent seasons when compared to historical data, with approximately 90% of total orange production made into either frozen concentrated orange juice (FCOJ) or single-strength orange juice (SSOJ), which is also referred to as not-from-concentrate (NFC) orange juice. Typically, processed utilization had represented between 95-96% of total orange production. The processed share of round orange boxes directly utilized for SSOJ was estimated at 12.96 million boxes in 2022-23. This SSOJ share was 90.6% of total processed utilization, the highest NFC share in Florida processor history. However, this still represented a decrease of 21.4 million boxes from last season. The quantity of orange boxes utilized in 2022-23 to produce FCOJ is estimated at 1.35 million boxes, a decrease of 2.84 million boxes over the previous season's utilization of 4.19 million boxes, representing a further decline in the share of boxes of oranges utilized to produce FCOJ.

Compared to the prior season, global availability of orange juice experienced further declines. The main orange juice producing countries (Brazil, Mexico, and the United States) witnessed a slight increase overall due solely to higher orange production in Brazil. Nevertheless, a general decrease in worldwide combined inventory projections resulted in a drop in the availability of orange juice globally by about 15%. The decline in availability in recent seasons has created uncertainty around the supply needed for processors to meet market demand for both NFC and concentrate orange juice. Aggregate OJ supplies from the three leading suppliers in 2022-23 is projected at 2.07 billion SSE gallons, a decrease of 381.3 million SSE gallons (or down 15.6% from last season's 2.45 billion SSE gallons) largely due to the decline in beginning inventories along with reduced juice yields and orange production in Florida and Mexico. Global trade of orange juice must incorporate inventories along with production each season, and demand for orange juice United States must compete for supplies with demand in other markets in the world. While the vast majority of U.S. orange juice production is consumed domestically, Brazil and Mexico orange juice production is primarily intended for the world market. Even though there was a slight increase in the share of Brazil's exports to the United States in 2022-23, Brazil continued to be the leading source of orange juice in Europe.

The USDA-NASS September 2023 estimate for the 2022-23 Florida grapefruit crop production was 1.81 million boxes, a decrease of 45.6% from last season's crop of 3.33 million boxes. Florida grapefruit production has declined by more than 96% since the 2003-04 season due to the harmful impacts of hurricanes and HLB. The September 2023 estimated production for the white grapefruit crop was 250,000 boxes, down by half from last season, and the red grapefruit crop was 1.56 million boxes, down 1.27 million boxes from last season. Certified fresh grapefruit shipments were nearly 1.04 million boxes in 2022-23, which would represent a decline of about

41% compared to certified fresh utilization last season. Non-certified fresh utilization was around 30,000 boxes in 2022-23 season. Processed utilization is projected to account for approximately 38% of the total crop and was roughly 680,000 boxes, a decline of about 55.3% compared to the 2021-22 season. Utilization of the processed grapefruit crop into single-strength grapefruit juice (SSGJ), which is used to make NFC grapefruit juice, accounted for 100% of processed utilization this season. The 2022-23 season may have marked a structural shift away from processed utilization of the Florida grapefruit crop into frozen concentrated grapefruit juice (FCGJ). High demand for grapefruit concentrates in the latter half of 2023 may reverse the trend this season. The remaining 60,000 boxes are designated as other processed utilization. Combining both initial inventories and production, the projected availability of GJ in 2022-23 stands at 22.6 million SSE gallons, marking a 24.5% decrease and a drop of 7.33 million gallons compared to the previous season. The 2022-23 ending inventory for Florida GJ is estimated at 9.96 million SSE gallons (or 40.9 weeks supply).

Meanwhile, Florida's certified fresh grapefruit utilization accounted for approximately 57% of total grapefruit production during the 2022-23 season, a much higher share than in previous years. Certified fresh grapefruit shipments in 2022-23 were 1.04 million boxes, representing a decline of 34% compared to the previous season. The domestic share of these fresh shipments has increased in recent years from around 42% annually to an 83% share of all Florida fresh grapefruit shipments. Florida exported 360,000 cartons of certified fresh grapefruit during the 2022-23 season, representing a decline of 61% over last season. Florida fresh grapefruit was shipped to various export markets in Asia, Europe, and Canada.

The preliminary estimate for the 2022-23 Florida specialty citrus crop production is 480,000 boxes, a decrease of 270,000 boxes from last season. Despite higher freight on board

(FOB) prices in recent years, specialty production has declined more than 94% since the 2003-04 season. Specialty citrus includes tangelos, Royal tangerines (formerly known as Temple oranges), early tangerine varieties, honey tangerines, Autumn Honey, Juicy Crunch, Orri, Roe, Tango, and other minor tangerine varieties. Florida certified shipments are estimated to be about 67% of the crop with 320,431 boxes (equivalent to 640,862 cartons) moving during the 2022-23 season, primarily to the domestic market.

The citrus industry in Florida grappled with significant setbacks at the onset of the season which stymied production recovery efforts. The brunt of the adverse weather events was borne by the citrus crops, which suffered extensive losses and tree damage resulting from freezing temperatures, strong winds, and water inundation. Nearly all of Florida's 375,000 acres of commercial citrus across the state experienced production losses due to hurricane or tropical storm force winds. Initial estimates of tree damage indicated a substantial loss ranging from 8% to 11% of the industry's total 55.75 million commercial citrus trees, as reported in the survey by Florida Citrus Mutual (FCM). Crop losses were conservatively estimated to exceed \$247 million but could exceed \$250 million (Court, et al., 2023). Ultimately, commercial citrus producers in the state were estimated to have incurred staggering losses, potentially surpassing \$675 million when commercial tree losses were estimated and included in the crop loss assessments.² This series of natural disasters had a profound and enduring impact on the citrus industry's economic landscape in Florida.

As such, the Florida citrus industry continues to be in a state of recovery following several years of decline, including dealing with higher production costs, reduced overall tree replant rates, and annual declines in fruit availability that have had irremediable impacts on industry

² Total citrus tree replacement estimates based on grower surveys and a \$54.29 tree replacement and care UF/IFAS estimate adjusted to 2022 dollars.

infrastructure. Recognizing the importance of this \$6.9 billion industry, Florida will need to continue making strategic investments in replanting efforts today to ensure a more resilient and productive future. Furthermore, in today's consumer landscape, there's a growing recognition of the challenges posed by price increases amid supply shortages. These facts emphasize the importance of reinforcing consumer awareness of the benefits of citrus products and alleviating concerns about rising prices. It's imperative to foster and support the demand for orange juice through strategic marketing.

Florida Orange Crop, Utilization and Movement

This section provides an overview of world orange production and utilization trends that is likely to impact the Florida citrus industry outlook during the 2023-24 season. Table 1 provides estimates of the orange utilization and outlook of the leading suppliers of orange juice on the world market, namely Brazil, Mexico, and the United States. Total combined orange production in the United States, Brazil, and Mexico are expected to increase by 1.8% with the United States, Brazil, and Mexico expected to produce approximately a combined 583 million 90-lb equivalent boxes in the 2023-24 season.

Specifically, the United States is expected to produce 60.8 million 90-lb equivalent boxes, Brazil is expected to produce 410.6 million 90-lb equivalent boxes, and Mexico is expected to produce an estimated 112.0 million 90-lb equivalent boxes in the 2023-24 season. The data suggests that approximately 64.8% of production in these countries would be utilized for processing, a projected 3.0% increase over last season. The remainder of this section looks specifically at utilization within each country.

Florida

The USDA/NASS October forecast for the 2023-24 Florida round orange crop is 20.5 million boxes, which would represent an increase of 29.7%, or equivalent to 4.7 million boxes compared to last season's crop of 15.8 million boxes. Table 2 reports Florida orange box utilization. The 2023-24 early and mid-season orange crop forecast, including Navel oranges, is 7.5 million boxes, up 1.4 million boxes (or an increase of 22%) from last season. The navel orange crop is forecasted at 300,000 boxes, representing 4% of the total early and mid-season orange crop estimate. The Valencia crop is forecasted at 13.0 million boxes, a projected 34.7% increase over last season's Valencia production of 9.7 million boxes.³

This Outlook assumes approximately 93% of orange production will be utilized in the processed market. The number of round orange boxes directly utilized for single-strength orange juice (SSOJ), which is used to make not-from-concentrate (NFC) orange juice, is estimated at 17.48 million boxes (or 92% of total processed utilization) in the 2023-24 season, an increase of 4.52 million boxes from last season. The quantity of orange boxes utilized in 2023-24 to produce FCOJ is estimated at 1.52 million boxes, an increase of 171,392 boxes over last season's utilization of 1.35 million boxes. Certified fresh orange shipments in 2023-24 are estimated at 1.39 million boxes, down 6.7% from the 1.49 million boxes shipped last season. Florida's processed orange utilization is estimated at nearly 19 million boxes, an increase of 32.8% over last season's utilization of 14.31 million boxes.

Total juice yield for Florida processed production is roughly estimated to be 4.824 SSE gallons per box for the 2023-24 season based on an evaluation of currently available production

³ One Florida orange box weighs 90-lb.

and movement data, as well as the forecast components reported in the USDA forecast. An overview of historical juice yields is reported in Table 4.

São Paulo

Brazil is the leading exporter of orange juice in the world with most of its production reaching markets in Europe, North America, and Asia. Orange production in the State of São Paulo and the West-Southwest Minas Gerais citrus belt, where most of Brazil's oranges used for processing are grown, decreased by 1.5% from 314.1 million boxes in the 2022-23 season to an estimated 309.3 million boxes in the 2023-24 season (Fundecitrus, 2023). At the same time, current estimates suggest processed utilization may increase by roughly 1.5% over the previous season from 265.3 million 90-lb equivalent boxes to 269.3 million 90-lb equivalent boxes, an increase of 4 million boxes. The current estimates for the São Paulo orange crop, as reported by Fundecitrus, are found in Table 3. Juice yield for São Paulo production is estimated to be 5.040 SSE gallons per box for the 2023-24 season (Fundecitrus, 2023). An overview of historical juice yields is reported in Table 4.

Mexico

Mexico is the second leading exporter of orange juice. The share of its orange production into the processing sector and its exports has increased incrementally in recent seasons in response to declines in world orange juice supplies. Although a net exporter of orange juice, orange production in Mexico is primarily intended for consumption in the fresh, domestic market. However, favorable prices and supply shortages in the United States over the last decade continue to displace fresh utilization in favor of the processed export market. Between 80 to 83 percent of Mexican exports are destined for the U.S. market. The packout rate for fresh oranges declined marginally each season, with supplies diverted to processed utilization. The orange fruit processing period in Mexico, from October through April, overlaps Florida's. While most of the processed

utilization goes into FCOJ, with Mexico producing mainly Valencia varieties for processing, NFC production has increased incrementally each season.

Over the last four seasons, production has been inconsistent due to inclement weather and other unknown factors. Mexico experienced extreme weather conditions in 2021, impacting the available crop. Without official estimates, this Outlook considers recent trends in production and review information from industry sources. Final estimates rely on the USDA Foreign Agricultural Service (FAS) production, supply, and demand data and are to be considered approximations. The estimates for the Mexico orange crop, found in Table 3, are based on the most current data through the 2022-23 season reported by USDA-FAS. Projections for the 2023-24 season in this report are based on industry sources for what to expect in the upcoming season. The projections presented in this report are based on analysis derived from industry sources, which has been applied to the publicly available data provided by USDA-FAS (PSD-Online, 2023). Processed orange production in Mexico is expected to increase by as much as 21% over last season from 43.1 million 90-lb equivalent boxes to 52.4 million 90-lb equivalent boxes, an increase of 9.3 million boxes. If weather conditions remain favorable, this season could prove to be highly advantageous for the Mexican orange crop. Juice yield for Mexico production is roughly estimated to be 5.685 SSE gallons per box for the 2022-23 season and is based on an evaluation of currently available production and movement data provided by USDA-FAS. However, it is important to note that the juice yield has not fluctuated in recent years, indicating a lack of official estimates emerging from Mexico. An overview of historical juice yields is reported in Table 4.

Other U.S. Orange Production

Other U.S. oranges come primarily from California and Texas with utilization primarily intended for fresh consumption. Historically, about 80-85% of California and Texas oranges are sent to the fresh market. However, in recent years, processed share has increased. During the

2020-21 season, for example, California fresh utilization was estimated at 74% and Texas utilization was estimated at 76%, with the remainder going into processed. During the 2021-22 season, California fresh utilization was estimated increase to an 82% share with Texas fresh utilization hovering around a 58% share, with the remainder going into processed. During the 2022-23 season, California fresh utilization was estimated at 77% share with the share of Texas fresh orange utilization at 75%. During the 2021-22 season, the share of Texas fresh orange utilization at 58% due to a smaller crop following the February 2021 freeze.

According to the USDA/NASS citrus production forecast for the 2023-24 season, California is expected to produce 37.0 million 80-lb boxes of non-Valencia type oranges and 7.5 million 80-lb boxes of Valencia oranges for a total of 44.5 million boxes of oranges, an increase of 3% over the previous season's crop. As many as 10.1 million boxes are estimated to be processed into juice based on previous utilization rates. The USDA/NASS citrus production forecast for Texas non-Valencia and Valencia type orange production in the 2023-24 season is estimated to decrease by 29.2% overall to 800,000 85-lb boxes. The Texas crop share into processed utilization is currently estimated at 211,765 85-lb boxes. This analysis estimates that as many as 9.2 million 90-lb Florida-equivalent boxes of California and Texas combined production may be used in the processing of orange juice. The share of single-strength and concentrate is not reported by either state. This analysis projects that orange juice production may increase by approximately 3.1% from an estimated 40.0 million SSE gallons of orange juice in the 2022-23 season to 41.2 million SSE gallons in the 2023-24 season.

Orange Juice Production and Availability

This section describes orange juice (OJ) availability on the domestic market by evaluating world production, inventories, and movement. Orange juice production and availability are key

measures in sustaining the demand for Florida citrus products over the long run. Table 5 provides estimates of comparative juice production from Florida, Brazil, and Mexico based on their respective production seasons. For the 2023-24 Florida season, estimated total supply of orange juice on the world market is projected to increase by 6.1% over the previous period from 1.65 billion SSE gallons to 1.75 billion SSE gallons due to increased production projections in from two leading suppliers, namely Mexico and Florida (Table 5). Florida production is estimated to contribute 5.4% of orange juice to this total supply this season.

Global trade is subject to fluctuations driven by shifts in supply. Consequently, an upturn in production might not fully compensate for the decline in existing inventories this season. Both the U.S. and Brazil will rely on their current inventory levels to satisfy present demand, especially considering that combined supplies were down by 15% at the onset of the Florida citrus season. Mexico also plays a crucial role as a supplier for the U.S. market, but there is limited evidence to suggest that Mexico maintains a consistent inventory from season to season. In recent times, both Brazil and Mexico have emerged as formidable suppliers of NFC orange juice to the United States which has contributed to a displacement of FCOJ among declining supplies. However, to meet the demand, orange juice stocks have fallen below optimal levels in recent years, leading to an overall reduction in availability.

Comparisons of beginning inventories and production levels of orange juice for Florida, São Paulo, and Mexico are provided in Table 6. Aggregate OJ production from the three leading suppliers in 2022-23 is projected at 2.04 billion SSE gallons, a reduction of 25.3 million SSE gallons (or down 1.2% from last season's 2.07 billion SSE gallons) largely due to the decline in beginning inventories. World orange juice production must also consider world demand for orange juice stocks as the United States is only one of several markets for the leading suppliers. While the

vast majority of U.S. orange juice production is consumed domestically, São Paulo and Mexico orange juice production is primarily intended for the world market. The share among Brazil and Mexico export markets for orange juice are reported in Tables 7 and 8, respectively.

Based on Brazilian Department of Foreign Trade (SECEX) data, an estimated 1.36 billion SSE gallons of OJ were exported from Brazil in 2022-23, down 3.4% from the 1.41 billion SSE gallons exported in 2021-22. Most of Brazil's orange juice exports are bound for Europe, with shipments to Europe during the 2022-23 season at an estimated 716.4 million SSE gallons (and representing approximately 53% of all exports), an estimated 19.4% decline over the previous season. The majority of Brazil's exports to Europe are frozen concentrate, representing 74% of the total in 2022-23 with NFC exports on the rise each season. A portion of Brazil's OJ sent to Europe may be re-exported to other markets. Brazil's OJ exports to East Asia were also down by 10.3% with 147.4 million SSE gallons. Yet, Brazil's exports to North American (USMCA) countries were up by 57% with 444.4 million SSE gallons, intended primarily for the U.S. market. A declining share, approximately 44%, of these exports in the 2022-23 season were frozen concentrate, used to make reconstituted, shelf stable, and frozen orange juice signaling a rise in the NFC export market to USMCA.

Based on U.S. Customs import data, an estimated 240.6 million SSE gallons of OJ were imported into the U.S. during the 2022-23 season through August 2023, up 33% from the 180.6 million SSE gallons imported during the entire 2021-22 season. A majority of Mexico's orange juice exports are bound for the United States, with reported imports at about 98.6 million gallons through August 2023, an estimated 40% decrease over the previous season. A review of U.S. orange juice imports by type of juice and origin are reported in Table 8 of this report.

Florida Orange Juice Inventory and Movement

Both demand-side and supply-side factors affecting orange juice availability are analyzed in this section. While the 2022-23 orange crop is expected to increase, Florida's orange juice (OJ) situation continues to be affected by the historical trend in reduced production levels largely associated with the spread of Huanglongbing (HLB, also known as citrus greening) and weather-related events. Concurrently, consumer demand for orange juice will outpace juice receipts from the Florida crop and imports during the previous season, ensuring that existing inventories would be needed. Simultaneously, the inflationary pressures within the category resulting from shortages and the high cost of production raise concerns that consumers might opt for alternatives due to elevated prices.

Preliminary projections for the Florida OJ situation (October-September season) are shown in Table 9. Florida's OJ imports are based on aggregate Florida-Brazil-Mexico OJ availability, and adjusted for Florida processor trends. Three scenarios for 2023-24 are provided, varying with respect to Florida processor imports.

The 2022-23 Florida citrus season concluded with a year-over-year reduction in SSOJ and FCOJ inventories from the previous season. Combined Florida OJ ending inventory for the 2022-23 season is 167.8 million SSE gallons or 15.3 weeks of supply, compared to 16.8 weeks in the previous 2021-22 season. Adding the 2022-23 ending inventory to the 2023-24 estimate of Florida OJ production of 94.3 million SSE gallons, plus an estimated imports and other adjustments totaling 445.9 million SSE gallons, Florida's OJ availability in 2023-24 (October 2023 through September 2024) is estimated at 708 million SSE gallons, down 46.1 million SSE gallons (or 6.1%) from last season's level despite the increase in juice production. Total movement in 2023-24 is estimated to decline by 61.6 million SSE gallons (or 10.5%) to 524.7 million SSE gallons from

last season. By the end of the 2023-24 season, Florida's OJ ending inventory is estimated to increase to 183.3 million SSE gallons (or 18.2 weeks of supply).

Import quantities will most likely be influenced by actual production, movement, and availability from non-Florida sources observed during the 2023-24 season. Holding all trends constant and considering alternate import scenarios where OJ imports are 10% higher and 10% lower than discussed in the previous paragraph, ending inventories would range from 143.3 million SSE gallons (14.2 weeks supply) to 223.3 million SSE gallons (22.1 weeks supply). Estimates of Florida's inventory, production and movement levels for FCOJ and NFC, underlying the total OJ estimates in Table 9, are shown in Table 10 and Table 11.

This analysis assumes approximately 8% of Florida processed orange utilization will be processed as FCOJ during the 2023-24 season. Beginning Florida processor inventories of FCOJ for the 2023-24 season totaled 65.5 million SSE gallons, representing a 46% decline. Florida processor FCOJ production is estimated at approximately 7.2 million SSE gallons based on an estimated utilization of 1.52 million boxes of round oranges and an average estimated FCOJ juice yield of 4.71 gallons per box in 2023-24 season. Imports of FCOJ, which is used to make Recon, shelf stable and frozen orange juice, are projected to increase by 9.5% to 190.2 million SSE gallons. Despite the increase in juice production and imports, total overall FCOJ availability is projected to decline by 13% when compared to the 2022-23 season. Total movement is projected to decline by at least 13.0% as a result of the decline in availability. Based on the estimated utilization, receipts, and movement trends, FCOJ ending inventories are projected to further decline by the end of the season to approximately 57.4 million SSE gallons (or 14.0 weeks of supply).

This analysis assumes that approximately 92% of Florida processed orange utilization during the 2023-24 season will be processed as SSOJ, which is used for NFC orange juice. At the onset of the 2023-24 season, beginning Florida processor inventories of SSOJ were 102.3 million SSE gallons (16.4 weeks supply), which is an increase of 12.7% when compared to the previous season due to higher imports in the 2022-23 season. Florida processor SSOJ production is estimated at approximately 87.1 million SSE gallons based on an estimated utilization of 17.48 million boxes of round oranges and an average juice yield of 4.99 SSE gallons per box, which would be a increase of 41.7% compared to the juice pack from fruit last season. Imports and domestic receipts of SSOJ are projected to decrease by 12% to 208.3 million SSE gallons. However, imports are still more than double historical levels. The total overall SSOJ availability is anticipated to rise by 2.4% compared to the 2022-23 season, yet it remains below levels seen in previous seasons. Total movement, including EVAP into Recon, is projected to decline by at least 4.1% with a majority of SSOJ consumed through retail channels. Based on the estimated utilization, receipts, and movement trends, SSOJ ending inventories are projected to stabilize with an increase by the end of the season of approximately 121.1 million SSE gallons (or 21.0 weeks of supply). Nonetheless, any deviation in movement and import projections would have the potential to decrease the overall ending weeks' supply.

U.S. Orange Juice Supply, Disappearance and Retail Sales

The volume of orange juice disappearance, derived from comprehensive inventory data tracking, grapefruit juice produced from the current crop, imports, exports, and ending inventory, serves as a pivotal measure in this analysis, offering insights into the availability of grapefruit juice to meet consumer demand and serves as a proxy for what is presumed consumption.

Presumed consumption is a rough measure of market performance reflecting orange juice movement in which the disappearance of orange juice from measurable data is calculated as the sum of: 1) beginning U.S. inventory, 2) Florida and other U.S. production, and 3) U.S. imports minus 1) U.S. exports and 2) ending U.S. inventory. U.S. ending inventories for OJ consider Florida processor ending inventories and the USDA-NASS cold storage survey report. Cold storage stocks are updated monthly.

A preliminary estimate of total U.S. OJ disappearance is projected 659.4 million SSE gallons for the 2023-24 season, a projected decline of 2.2% from an estimated 674.5 million SSE gallons consumed in the previous season (Table 12). The projected reduction in consumption reflects both a contraction in supply on the domestic market and tempered demand during a period of high inflation compared to previous years. Total U.S. OJ production is estimated at 135.3 million SSE gallons based on the USDA forecast for the orange crop in Florida, California, and Texas (NASS-USDA, 2023a). Total U.S. OJ imports are projected at around 544.3 million SSE gallons, a projected decrease of 5.1% over the previous season. The projected decrease in total U.S. imports may reflect reduced global availability of juice giving reduced beginning inventories from previous years. U.S. exports are projected at 31.1 million SSE gallons, a 2.3% increase over last season.

By comparison, Florida processor orange juice receipts, movement, and net change in inventory are reported in Table 13. Net from Florida fruit refers to the orange juice production from Florida-sourced oranges in each season which is compared to receipts of 100% orange juice from imported sources, domestic sources, and non-reporting Florida facilities. Movement is reported by Florida processors and includes domestic packaged movement, bulk movement and exported juice. During the 2023-24 Florida citrus season, Florida orange production is projected

to account for 26% of SSOJ and 4% of FCOJ receipts by processors, respectively. Specifically, Florida processors are expected to receive 87.1 million gallons of SSOJ from Florida production and 249.3 million gallons from other sources. Florida processors are expected to receive 8.1 million gallons of FCOJ from Florida's orange crop with a remaining 198.1 million gallons from other sources. The majority of SSOJ movement from Florida processors is packaged in Florida facilities, whereas the majority of FCOJ movement is reported as bulk movement likely packaged out of state. It is estimated that between 63-68% of orange juice from Florida movement is consumed through retail channels with the remainder consumed as foodservice and institutional demand.

The Nielsen Topline Report provides more exact measures across retailers, but with abridged market coverage. The Florida Department of Citrus (FDOC) purchases Nielsen retail outlet data for OJ sales in grocery stores with annual sales of at least \$2 million, drug stores with annual sales of at least \$1 million, mass merchandisers, such as Wal-Mart, club (Sam's and BJ's), dollar stores (Dollar General, Family Dollar, and Fred's), and military/Defense Commissary Agency (DeCA). The following analysis is based on the Nielsen retail universe Expanded All Outlets Combined (xAOC) data described above. The average price of orange juice and OJ volume sales at retail during the 2023-24 season will be largely dependent upon juice availability, market growth/contraction, and substitutes not yet known. Retail sales are estimated assuming consumer behavior during 2023 will carry forward into the 2023-24 season amid consumer concerns over high inflation in the economy. It is also assumed that supply constraints will not be apparent until later in the season and well into next season. Estimated price projections consider the high price scenario and are adjusted to account for various marketing conditions with a sensitivity analysis

are provided for three price scenarios in Table 14.⁴ In addition to the estimated price projections, this analysis incorporates a comprehensive demand model that accounts for the elasticity of demand across various types of orange juice (OJ). This model takes into consideration the responsiveness of consumer demand to price changes for different OJ variants, providing valuable insights for decision-making. The results of this demand elasticity analysis are presented in conjunction with three price scenarios in Table 14, enhancing our understanding of potential retail sales outcomes.

Scenario 1 (the high price projection): Overall retail OJ price is projected to increase from \$8.81 per gallon in 2022-23, to \$9.05 per gallon in 2023-24, a 3% increase in retail price. The price increase over the course of the season is projected to lead to a reduction in retail sales volume, measured in equivalent gallons. In the 2023-24 period, orange juice sales within Nielsen retail outlets are estimated to reach approximately 300.1 million equivalent gallons, marking a 16% decline from the previous season's sales of 357.4 million SSE gallons, based on an average price of \$9.05 per equivalent gallon. Estimates of sales by segment (FCOJ, NFC, and RECON) are also shown in the table. The increase in prices is also attributed to an expected reduction in promotional activity. In addition to its own price, the demand for OJ depends on levels of OJ advertising and promotion, consumer income, attitudes and perceptions, and competition from other beverages through prices and advertising/promotion levels of these beverages, as well as other factors. Higher promotional activity at retail, on the other hand, would trend towards the low-price scenario.

Scenario 3 (the low price projection): Overall retail OJ price is projected increase to at a slower pace from \$8.81 per gallon in 2022-23, to \$8.92 per gallon in 2023-24, a 1% increase in retail price. The low-price scenario is also projected to lead to a reduction in retail sales volume over the

⁴ Retail market forecasts prepared by Sungeun Yoon, Ph.D., Assistant Research Scientist, Food and Resource Economics Department, University of Florida

course of the seas, as measured in equivalent gallons, but at a more controlled pace. In the 2023-24 period, orange juice sales within Nielsen retail outlets are estimated to reach approximately 330.4 million equivalent gallons, marking an 8% decline from the previous season's sales of 357.4 million SSE gallons, based on an average price of \$8.92 per equivalent gallon.

The preceding estimates represent a 55% NFC market share of OJ category market sales volume, RECON market share estimated at 38% of total OJ category market sales volume, FCOJ market share estimated at 3.7% of total OJ category market sales volume, and remaining share of total volume allocated to shelf stable.

Orange juice that is sold on trade promotion at retail has been at historically low levels the last couple of years, contributing to the increase in the average price. The share of orange juice sold on promotion with corresponding price per equivalent gallon is reported in Table 15. Nielsen collects promotional information from retailers, known as trade promotions, which are compiled into four categories in the FDOC Nielsen custom database. The key promotional items are: 1) feature items, 2) display items, 3) a combination of both feature and display, and 4) temporary price reductions (also known as price decrease). The FDOC Nielsen custom database provides periodic updates on the share of retail sales sold with and without promotions. Feature items are retailer specific promotions, such as print ads and coupons from retailers. Displays must be set in a secondary selling location and showcase a product in high traffic areas that consumers can pick up and purchase. A display must be temporary for Nielsen to recognize as a display. A promotion that combines elements of features and displays are tracked separately. Finally, a common trade promotion is a temporary price reduction. Price decreases must be at least five percent lower than the regular price. If the lower price persists over 13 consecutive weeks, Nielsen will consider the

reduced price as the new regular price and will no longer record the item as sold on promotion (source: NielsenIQ).

The reporting of promotional activity increased slightly during the 2022-23 season with an analysis of trade promotions revealing that 26.0% of total orange juice sold during the 2022-23 season was sold on promotion. The sales of NFC and Recon orange juice sold on promotion accounted for 28.9% and 24.5%, respectively, of volume movement. The average price of orange juice sold on trade promotion during the 2022-23 season was \$8.25 per equivalent gallon compared to a no promo price of \$9.00 per equivalent gallon.

Florida Fresh Orange Shipments, by Market

Florida fresh certified shipments are reported in Table 16. Certified fresh orange utilization is projected to account for approximately 6.8% of total orange production during the 2023-24 season. As such, certified fresh orange shipments in 2023-24 are estimated at 1.39 million boxes (equivalent to 2.78 million cartons), which would be a decrease of 6.7% from the 1.49 million boxes (equivalent to 2.98 million cartons) shipped last season despite the overall increase in Florida orange production in the 2022-23 season. Domestic fresh orange shipments are projected at 2.69 million cartons, down by 195,480 cartons. The domestic share is projected to be about 97% of all Florida fresh orange shipments in 2023-24. Florida packers are projected to export 97,379 cartons of fresh oranges during the 2023-24 season, representing a decline of 3.3% compared to last season. Accounting for 87% of all exports, Canada was the leading destination of Florida fresh oranges.

Florida Grapefruit Crop, Utilization and Movement

The USDA/NASS October estimate of the Florida grapefruit crop in 2023-24 is 1.90 million boxes, a 5% increase compared to last season's crop of 1.81 million boxes (Table 17).

Florida grapefruit production has suffered losses of more than 85% since the 2005-06 season due to the harmful impacts of hurricanes and HLB. In recent years, the utilization of Florida grapefruit in the fresh market has seen an uptick, driven by increasingly favorable market prices and deliberate plantings specifically intended for the fresh market. Between the 2004-05 and the 2019-20 seasons, the average portion of Florida's certified fresh grapefruit in relation to the total crop was 40%. However, in the past three years, this share has surpassed 50%. In this analysis, it is assumed that fresh certified grapefruit will account for 57% of the overall grapefruit utilization, consistent with the previous season. Certified fresh grapefruit shipments are estimated to be 1.08 million boxes in 2023-24, up by 4% compared to certified fresh utilization last season. Non-certified fresh utilization is forecasted at 40,000 boxes in 2023-24. Processed utilization is projected to account for approximately 41% of the total crop and is estimated at 777,000 boxes, up by 13.7% compared to the 2022-23 season. This outlook assumes that utilization of the processed grapefruit crop into single-strength grapefruit juice (SSGJ), which is used to make NFC grapefruit juice, is expected to account for nearly 100% of processed utilization with an estimated 777,000 boxes used this season, which represent an increase of about 13.7% compared to last season. Utilization of the processed grapefruit crop into frozen concentrated grapefruit juice (FCGJ) is estimated at 100 boxes in 2023-24.

Florida Grapefruit Juice Inventory and Movement

Florida processors began the 2023-24 season with 9.57 million SSE gallons of GJ in inventory (39.2 weeks supply), down from the previous season's level of 12.66 million SSE gallons (43.7 weeks supply based on average movement at that time) (Table 18). Combined GJ production plus processor imports, domestic and foreign, in 2023-24 is estimated at 8.90 million SSE gallons, down 0.82 million SSE gallons from last season. Combining production with

beginning inventories, GJ availability in 2023-24 is estimated at 18.5 million SSE gallons, down by 17.4% and representing a decrease of 3.90 million gallons from last year. GJ movement in 2023-24 is estimated at 11.28 million SSE gallons, down 12.7% from last year. The 2023-24 ending inventory for Florida GJ is estimated at 7.19 million SSE gallons (or 33.1 weeks supply). Table 18 also describes the availability, movement, and inventory estimates for FCGJ and single-strength grapefruit juice (SSGJ) projected for the 2023-24 season.

The 2022-23 season marked a structural shift in which Florida processors Florida processors utilized nearly 100% of the processed grapefruit crop for SSGJ (i.e., GJ NFC). Florida processors are projected to utilize 99.9% of processed grapefruit for SSGJ (or GJ NFC). Beginning inventory of SSGJ for the 2023-24 season is down by 26.4% over the previous season at 6.22 million SSE gallons (28.87 weeks supply). Production from Florida fruit is estimated at 4.09 million SSE gallons based on an estimated 0.78 million boxes of grapefruit and juice yield 5.223 SSE gallons per box, representing a 24.6% increase in pack from fruit over the previous season. Florida processors utilized less than 0.001% of processed grapefruit for FCGJ in the 2022-23 season. It is unknown if Florida processors will process grapefruit into FCGJ this season. For the sake of this analysis, it is assumed that Florida processors will utilize 0.1% of processed grapefruit for FCGJ. Beginning inventory of FCGJ for the 2023-24 season is down by 20.3% over the previous season at 3.35 million SSE gallons (92.97 weeks supply). Exports of in 2023-24 are estimated at 0.03 million SSE gallons based on analysis of Florida processor statistics and industry sources. In some seasons, the level of GJ exports reported by the Florida citrus processors has exceeded the level reported by the U.S. Department of Commerce. The U.S. Department of Commerce data are tracked to provide an indication of market shares across export destinations.

U.S. Grapefruit Juice Supply, Disappearance, and Retail Sales

The volume of grapefruit juice disappearance, derived from comprehensive inventory data tracking, grapefruit juice produced from the current crop, imports, exports, and ending inventory, serves as a pivotal measure in this analysis, offering insights into the availability of grapefruit juice to meet consumer demand and serves as a proxy for what is considered to be presumed consumption.

Presumed consumption is a rough measure of market performance reflecting grapefruit juice movement in which the disappearance of grapefruit juice from measurable data is calculated as the sum of: 1) beginning U.S. inventory, 2) Florida and other U.S. production, and 3) U.S. imports minus 1) U.S. exports and 2) ending U.S. inventory. U.S. ending inventories for GJ consider Florida processor ending inventories and industry sources for the rest of the United States. The measure considers combined grapefruit juice types in which not-from-concentrate grapefruit juice and frozen concentrated grapefruit juice are not disaggregated.

U.S. presumed consumption of GJ is estimated 21.8 million SSE gallons in 2023-24, compared to 24.0 million SSE gallons in the previous season (Table 19). The consumption levels are more than twice expected sales volumes at retail, as reported by Nielsen. This may exclude some cold storage supplies not tracked within the FDOC Florida processor database or by USDA cold storage estimates. Total U.S. GJ production is estimated at 13.90 million SSE gallons, based on Florida processors data and the USDA forecast of the grapefruit crop in California and Texas. Total U.S. GJ imports are estimated at 9.06 million SSE gallons, an increase of 6% over the previous season. U.S. exports are projected at 3.91 million SSE gallons based on analysis of Florida processor statistics.

Other U.S. grapefruit come primarily from California and Texas, with utilization intended for both fresh and processed consumption. According to the USDA-NASS citrus production forecast for the 2023-24 season, California is expected to produce 3.5 million 80-lb boxes of grapefruit, which would be a decrease of 12.5% compared to last season. Approximately 1.05 million boxes are estimated to be processed into juice this season based on previous utilization rates. The USDA-NASS citrus production forecast for Texas grapefruit production in the 2022-23 season is estimated to decrease by 2.2% to 2.2 million 80-lb boxes. The Texas crop share into processed utilization could represent roughly 950,000 80-lb boxes. This analysis suggests that as many as 1.8 million 85-lb Florida equivalent boxes of California and Texas combined production may be used in the processing of grapefruit juice. The share of single-strength and concentrate is not reported by either state. This analysis projects that grapefruit juice production may decrease by approximately 7.9% from an estimated 10.7 million SSE gallons of orange juice in the 2021-22 season to 9.8 million SSE gallons in the 2023-24 season.

In addition to GJ prices, retail sales of GJ during the 2023-24 season may be constrained by declines in distribution, substitutes, and decline in promotion. Estimates are provided for three price scenarios. Nielsen retail sales of GJ are projected to decline in the 2023-24 season with estimates of sales by segment (FCGJ, NFC, and RECON) shown in Table 20. The estimated sales reflect market share of NFC GJ will be 69% of retail sales volume, Shelf Stable market share estimated at 26% of retail sales volume, FCGJ market share estimated at 3% of retail sales volume, and remaining shares allocated to Recon GJ. Even prior to the pandemic, grapefruit juice sold on promotion has been on the decline. The share of grapefruit juice sold on promotion with corresponding price per equivalent gallon is reported in Table 21.

Grapefruit juice selling on promotion at retail, like orange juice, has been historically low, and this is contributing to an increase in the average reported price. The share of grapefruit juice sold on promotion with corresponding price per equivalent gallon is reported in Table 21. Nielsen collects promotional information from retailers, known as trade promotions, which are compiled into four categories in the FDOC Nielsen custom database. The key promotional items are: 1) feature items, 2) display items, 3) a combination of both feature and display, and 4) temporary price reductions (also known as price decrease). The FDOC Nielsen custom database provides periodic updates on the share of retail sales sold with and without promotions. Feature items are retailer specific promotions, such as print ads and coupons from retailers. Displays must be set in a secondary selling location and showcase a product in high traffic areas that consumers can pick up and purchase. A display must be temporary for Nielsen to recognize as a display. A promotion that combines elements of features and displays are tracked separately. Finally, a common trade promotion is a temporary price reduction. Price decreases must be at least five percent lower than the regular price. If the lower price persists over thirteen consecutive weeks, Nielsen will consider the reduced price as the new regular price and will no longer record the item as sold on promotion (source: NielsenIQ).

Scenario 1 (the high price projection): Overall retail GJ price is projected to increase from \$10.32 per gallon in 2022-23, to \$10.92 per gallon in 2023-24, a 6% increase in retail price. The price increase over the course of the season is projected to lead to a reduction in retail sales volume, measured in equivalent gallons. In the 2023-24 period, grapefruit juice sales within Nielsen retail outlets are estimated at approximately 8.45 million equivalent gallons, which would be a 21% decline from the previous season's sales of 10.70 million SSE gallons, based on an average price of \$10.32 per equivalent gallon that season. Estimates of sales by segment (FCGJ, NFC, and

RECON) are also shown in the table. In addition to own price elasticity, the demand for GJ depends on levels of GJ advertising and promotion, consumer income, attitudes and perceptions, and competition from other beverages through prices and advertising/promotion levels of these beverages, as well as other factors. Increased distribution or higher promotional activity at retail, on the other hand, would trend towards the low-price scenario. Scenario 3 (the low-price projection): Overall retail GJ price is projected decrease \$10.32 per gallon in 2022-23 to \$10.29 per gallon in 2023-24, a 0.3% decrease in retail price. Yet, the low-price scenario is also projected to lead to a reduction in retail sales volume over the course of the season suggesting asymmetric demand in which consumers respond to price reductions at a slower pace. In the 2023-24 period, grapefruit juice sales within Nielsen retail outlets are estimated to reach approximately 9.16 million equivalent gallons, marking an 14% decline from the previous season's sales of 10.70 million SSE gallons, based on an average price of \$10.29 per equivalent gallon.

The share of grapefruit juice sold on promotion with corresponding price per equivalent gallon is reported in Table 21. The reporting of promotional activity increased slightly during the 2022-23 season with an analysis of trade promotions revealing that 25.4% of total grapefruit juice sold during the 2022-23 season was sold on promotion. NFC and shelf stable grapefruit juice sales sold on promotion accounted for 31.6% and 9.1%, respectively, of volume movement. The average price of orange juice sold on trade promotion during the 2022-23 season was \$9.06 per equivalent gallon compared to a no promo price of \$10.74 per equivalent gallon.

Fresh Grapefruit Shipments, by Market

Florida fresh certified grapefruit shipments are reported in Table 22. Certified fresh grapefruit utilization is projected to account for approximately 57% of total grapefruit production

during the 2023-24 season. Certified fresh grapefruit shipments in 2023-24 are currently estimated at 1.08 million boxes (equivalent to 2.17 million cartons), which would represent an increase of 4.6% compared to last season. Domestic fresh grapefruit shipments are projected at 1.70 million cartons, which would represent a decline of 0.9% compared to last season. The domestic share has increased in recent years from around 42% annually to an 83% share of all Florida fresh grapefruit shipments in the 2022-23 season. The projected 78% domestic share represents a slight increase in exports expected this season. Export shipments are projected at 0.47 million cartons of fresh grapefruit during the 2023-24 season, representing an increase of 31% compared to last season. Certified Florida fresh exports represent 22% of fresh shipments. Florida fresh grapefruit will ship to various export markets in Asia, Europe, and Canada. Accounting for an estimated 142,230 cartons, the top markets for Florida certified fresh grapefruit in Asia are Japan and Korea (ROK). Europe is projected to receive approximately 216,600 cartons of fresh Florida grapefruit, and Florida fresh packers are expected to ship approximately 111,350 cartons to Canada, accounting for 5% of total exports and 12% increase compared to the previous season.

Florida Specialty Crop and Utilization

The USDA/NASS October estimate of the Florida specialty crop in 2023-24 is 500,000 boxes, an increase of 20,000 boxes from last season (Table 23). Despite higher FOB prices in recent years, specialty production has declined more than 92% since the 2004-05 season. The USDA/NASS preliminary estimate of specialty citrus includes tangelos, Royal tangerines (formerly known as Temple oranges), early tangerine varieties, honey tangerines, Autumn Honey, Juicy Crunch, Orri, Roe, Tango, and other minor tangerine varieties. Temples were classified and reported as early-midseason oranges between the 2005-06 and 2015-16 seasons. Florida certified shipments are estimated to be about 67% of the crop with an estimated 335,000 boxes (equivalent

to 670,000 million cartons) moving during the 2023-24 season to primarily the domestic market (Table 24). Domestic fresh specialty shipments are projected at 655,255 cartons, up by 23,017 cartons. The domestic share typically represents close to 97% of annual shipments. Florida packers are projected to export approximately 14,745 cartons of fresh specialty fruit during the 2023-24 season, representing an increase of 8,624 cartons over last season. Accounting for 63% of exports, Canada would be the leading destination of Florida fresh specialty.

Summary: Implications for the Florida Grower

The October citrus forecast for the 2023-24 Florida citrus season suggests Florida citrus production will increase by nearly 27% with 22.90 million boxes of oranges, grapefruit, and tangerines. The forecast also reports total U.S. citrus production for the 2022-23 season will increase overall by nearly 5% with a total of 96.90 million boxes of oranges, grapefruit, lemons, and specialty citrus from California, Florida, and Texas. Specifically, the October forecast projects 65.80 million boxes of oranges, 7.60 million boxes of grapefruit, and 23.50 million boxes of specialty tangerines and tangelos.

The USDA/NASS October forecast for the 2023-24 Florida round orange crop is 20.5 million boxes, which would represent an increase of 29.7% and add about 4.7 million boxes into circulation. Orange juice production and availability are key measures in sustaining the demand for the Florida orange crop over the long run. Florida processors of orange juice, for example, will rely on imports and existing inventory from the world's leading suppliers of orange juice, namely Brazil, Mexico, and the United States, to meet demand. Combined beginning inventories at the onset of this season are down by 30% compared to last season with overall availability is projected to decline by 1.2% despite Florida's projected orange crop increase.

The USDA/NASS October estimate of the Florida grapefruit crop in 2023-24 is 1.90 million boxes, a 5% increase compared to last season's crop of 1.81 million boxes. Over the past few seasons, there has been a notable change in grapefruit utilization trends, with a greater share being directed towards the fresh market, and nearly all processed usage being allocated to NFC GJ production. In the 2023-24 season, certified fresh grapefruit utilization is projected to represent around 57% of Florida total grapefruit production with estimated shipments of 1.08 million boxes (equivalent to 2.17 million cartons) shipping in larger share on the domestic market. Still, Florida grapefruit will reach global markets, specifically Europe, Asia, and Canada. Processed utilization is projected to account for approximately 41% of the total crop and is estimated at 777,000 boxes, up by 13.7% compared to the 2022-23 season.

The USDA/NASS October estimate of the Florida specialty crop in 2023-24 is 500,000 boxes, an increase of 20,000 boxes from last season. Florida certified shipments are estimated to be about 67% of the crop with an estimated 335,000 boxes (equivalent to 670,000 million cartons) moving during the 2023-24 season to primarily the domestic market.

While the projected increase in Florida citrus production is a positive development compared to last season, it's crucial to understand it within the context of broader trends. The October USDA forecast follows the tumultuous 2022 hurricane season and suggests a recovery effort. However, when viewed over a longer timeframe, it reveals a concerning pattern of overall decline in citrus production over the recent years. This calls for a careful approach to address both short-term recovery and long-term sustainability in the citrus industry in Florida.

Early projections for the 2023-24 Florida citrus season reveal a sustained demand for fresh and processed citrus products amid an expected decrease in overall availability. At the same time, demand of both fresh and processed citrus is tenuous as consumers face tough decisions amid high

inflation. As such, it is vital for the Florida citrus industry to stay the course in its efforts to ease harmful impacts to grower and processor returns due to severe multi-weather events in 2022 by alleviating higher production costs, increasing overall tree replant rates, and protecting and revitalizing industry infrastructure.

References

Court, C. D., X. Qiao, B. B. Saha, F. He, K. McDaid. 2023. Estimated Agricultural Losses Resulting from Hurricane Ian. UF/IFAS Economic Impact Analysis Program, Food and Resource Economics Department, University of Florida. Available at: <https://fred.ifas.ufl.edu/extension/economic-impact-analysis-program/disaster-impact-analysis/hurricane-ian-damage-assessments-2022/>

Florida Department of Citrus. 2023a. FDOC Processors statistics database. Economic and Market Research Department, Gainesville, FL.

Florida Department of Citrus. 2023b. Nielsen Retail Sales Monthly Topline Report: Report 13 of the 2022-23 Season. Economic and Market Research Department, Gainesville, FL.

Foreign Agricultural Service. December 2022. Mexico Citrus Update. GAIN report no. MX2022-0065, U.S. Dept. Agr., Washington D.C.

Foreign Agricultural Service. July 2023. Brazil Citrus Semi-annual 2023. GAIN report no. BR2023-0015. U.S. Dept. Agr., Washington D.C.

Foreign Agricultural Service Office of Global Analysis. July 2023. Citrus: World Markets and Trade, U.S. Dept. Agr. , Washington D.C.

Foreign Agricultural Service. Downloadable datasets – PSD online- U.S. Dept. Agr., Washington D.C.

Fundecitrus. September 2023. 2023-24 Orange Crop Forecast Update for the São Paulo and West-Southwest Minas Gerais citrus belt.

National Agricultural Statistics Service Florida Field Office. 2023a. Citrus October forecast. U.S. Dept. Agr., Maitland, FL.

National Agricultural Statistics Service Florida Field Office. 2023b. Forecast Components Update (July 2023). U.S. Dept. Agr.

National Agricultural Statistics Service Florida Field Office. 2023c. Florida citrus statistics 2021-22. U.S. Dept. Agr., Maitland, FL.

National Agricultural Statistics Service Florida Field Office. 2023d. Citrus fruits 2023 summary (August 2023). U.S. Dept. Agr.

National Agricultural Statistics Service Florida Field Office. 2023e. Cold Storage Survey (September 2023). U.S. Dept. Agr.

TABLES

Table 1. Utilization of world oranges – Selected Countries.

Season	United States			Brazil ^b			Mexico		
	Prod ^a	Util Fresh	Util Proc	Prod ^a	Util Fresh	Util Proc	Prod ^a	Util Fresh	Util Proc
- million 90-lb equivalent boxes -									
2004-05	208.8	53.1	155.7	377.0	120.0	257.0	98.0	79.9	18.1
2005-06	203.4	48.6	154.9	467.0	117.0	350.0	101.8	88.1	13.7
2006-07	171.8	33.0	138.8	406.0	110.5	295.5	104.1	86.9	17.1
2007-08	227.0	49.9	177.1	441.0	110.0	331.0	105.3	80.8	24.5
2008-09	205.2	43.3	162.0	453.0	113.0	340.0	102.7	78.2	24.5
2009-10	186.4	50.3	136.0	413.0	124.0	289.0	99.2	77.7	21.6
2010-11	197.9	51.1	146.7	417.0	130.0	287.0	99.9	77.2	22.8
2011-12	199.6	50.7	148.9	388.0	119.0	269.0	89.8	69.5	20.3
2012-13	183.7	49.8	134.0	554.0	135.0	419.0	107.8	70.8	37.0
2013-14	150.4	42.1	108.3	504.0	177.0	327.0	111.0	81.6	29.4
2014-15	141.2	40.1	101.1	401.0	133.0	268.0	110.6	72.6	38.0
2015-16	135.3	45.1	90.2	438.0	148.0	290.0	112.8	72.3	40.4
2016-17	113.1	39.6	73.5	409.7	127.7	282.0	113.4	62.0	51.4
2017-18	86.1	37.0	49.1	353.3	121.3	232.0	111.0	64.4	46.5
2018-19	120.6	38.2	82.5	512.0	117.0	395.0	113.6	59.7	53.9
2019-20	115.9	41.5	74.4	391.0	122.0	269.0	62.0	39.9	22.0
2020-21	97.5	36.2	61.3	473.0	121.0	352.0	101.3	68.2	33.1
2021-22	76.3	31.3	44.9	359.7	112.3	247.4	113.9	60.0	53.9
2022-23 ^p	55.3	32.1	23.2	415.0	114.2	300.8	102.9	59.8	43.1
2023-24 ^f	60.8	32.7	28.2	410.6	112.9	297.7	104.3	35.9	68.4

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a U.S. production estimates as reported by USDA-NASS Citrus Fruits Summary (*various issues*) and converted into 90-lb equiv. boxes; Brazil based on various Foreign Agricultural Service GAIN reports and Fundecitrus/CitrusBR. Mexico based on Foreign Agricultural Service, Official USDA Estimates as of September 2023.

^b As of 2023, Brazil Production, based on the Brazil Citrus Season (July-June), is reported concurrently with the current Florida citrus season (October-September) to reflect total availability in the Florida citrus season.

^c Weighted by utilized round oranges and specialty citrus used in OJ.

Table 2. Utilization of Florida round oranges.

Season	Certified ^a Fresh	FCOJ ^b	SSOJ ^b	Certified ^a Processed	Non-Certified Fresh	Other ^c	Total
millions 90-lb boxes							
2004-05	4.90	52.18	88.51	142.36	2.49	1.71	149.80
2005-06	4.53	49.11	90.17	140.46	2.78	1.11	147.70
2006-07	4.97	45.96	75.21	121.96	1.43	1.43	129.00
2007-08	4.42	80.80	85.11	163.83	1.43	1.27	170.20
2008-09	5.54	72.58	82.81	155.13	1.38	1.56	162.50
2009-10	4.49	52.74	75.14	127.48	1.37	1.68	133.70
2010-11	4.48	51.75	82.69	134.09	1.48	0.13	140.50
2011-12	4.63	65.35	75.52	140.28	1.46	-0.26	146.70
2012-13	4.59	47.95	79.23	127.18	1.38	0.41	133.60
2013-14	4.15	22.72	76.03	98.88	1.35	0.44	104.70
2014-15	3.99	19.22	71.89	91.72	0.98	0.87	96.95
2015-16	3.07	15.84	61.85	77.60	0.92	0.10	81.70
2016-17	2.19	12.65	53.27	66.09	0.62	0.14	68.85
2017-18	2.33	7.66	34.36	42.26	0.43	0.27	45.05
2018-19	2.32	15.20	53.76	69.11	0.43	0.16	71.85
2019-20	2.98	14.15	49.85	64.18	0.25	0.18	67.30
2020-21	3.05	5.81	43.66	49.65	0.22	0.21	52.95
2021-22	2.45	4.19	34.36	38.62	0.15	0.07	41.05
2022-23 ^p	1.49	1.35	12.96	14.26	0.12	<0.00	15.80
2023-24 ^f	1.39	1.52	17.48	--	0.11	0.00	20.50

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Certified deliveries to Florida processors based on Florida Department of Agriculture and Consumer Services data.

^b FCOJ and SSOJ utilization includes specialty boxes processed into orange juice; Florida reporting facilities (F.A.C. 20-3) only.

^c FDACS certified processed utilization exceeds USDA final processed utilization.

Table 3. Comparative utilization of round oranges, Florida, São Paulo, and Mexico.

Season	Florida			São Paulo ^a			Mexico ^b		
	Prod	Utilization		Prod	Utilization		Prod	Utilization	
		Fresh	Processed		Fresh	Processed		Fresh	Processed
- million 90-lb equivalent boxes -									
2004-05	149.8	7.4	142.4	380.0	44.0	336.0	98.0	80.1	18.1
2005-06	147.7	7.3	140.4	320.0	36.5	283.5	101.8	88.4	13.7
2006-07	129.0	6.4	122.6	350.0	34.0	316.0	104.1	86.6	17.1
2007-08	170.2	5.9	164.3	360.0	35.0	325.0	105.3	80.8	24.5
2008-09	162.5	6.9	155.6	315.0	39.0	276.0	102.7	78.1	24.5
2009-10	133.7	5.9	127.8	320.0	46.0	274.0	99.2	77.6	21.6
2010-11	140.5	6.0	134.5	285.0	28.0	257.0	99.9	77.3	22.8
2011-12	146.7	6.1	140.6	444.0	40.7	403.3	89.8	69.9	20.3
2012-13	133.6	6.0	127.6	385.4	80.0	314.2	107.8	70.7	37.0
2013-14	104.7	5.5	99.2	290.0	50.0	240.0	111.0	81.1	29.4
2014-15	97.0	5.1	91.8	309.0	60.1	248.9	110.6	72.2	38.0
2015-16	81.7	4.0	77.7	300.7	39.1	261.6	112.8	71.7	40.4
2016-17	68.9	2.8	66.0	245.3	59.7	185.6	113.4	60.6	51.4
2017-18	45.1	2.9	42.2	398.4	28.4	370.0	116.0	68.2	46.5
2018-19	71.9	3.0	68.8	286.0	49.2	236.8	115.5	60.9	53.9
2019-20	67.3	2.9	64.4	386.8	61.7	325.1	62.0	39.1	22.0
2020-21	53.0	3.3	49.7	268.6	46.1	222.5	113.9	59.2	53.9
2021-22	41.1	2.6	38.5	263.0	38.6	224.4	112.6	58.6	52.7
2022-23 ^p	15.8	1.6	14.2	314.1	48.8	265.3	102.9	58.7	43.1
2023-24 ^f	20.5	1.5	19.0	309.3	40.0	269.3	112.0	58.3	52.4

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Based on USDA, FAS, "Brazil Citrus Semi-annual," GAIN report various issues and Fundecitrus updates. As of 2023, São Paulo production, based on the Brazil Citrus Season (July-June), is reported concurrently with the current Florida citrus season (October-September) to reflect total availability in the Florida citrus season.

^b FAS Production, Supply and Demand database; 2020-21 and 2021-22 estimated using various industry sources. Data current through July 2021 and may not reflect the freezes from February 2021.

^c Weighted by utilized round oranges and specialty citrus used in OJ.

Table 4. Comparative orange juice yields, Florida, Brazil, and Mexico.

Season	Florida ^a	São Paulo ^b	Mexico ^c
		SSE gal/box	
2004-05	6.30517	6.23894	5.69285
2005-06	6.44845	5.79055	5.73593
2006-07	6.54986	6.24501	5.68517
2007-08	6.61971	6.07673	5.79887
2008-09	6.59442	6.18843	5.96943
2009-10	6.23481	5.59156	5.68517
2010-11	6.35204	5.38623	5.58736
2011-12	6.52862	5.87744	5.68517
2012-13	6.38718	5.32859	5.68517
2013-14	6.22370	5.36539	5.96554
2014-15	5.93257	5.01416	5.83188
2015-16	5.67329	5.87939	5.70240
2016-17	5.82744	4.67900	5.68517
2017-18	5.57996	4.93765	5.83478
2018-19	5.71727	5.01665	5.42675
2019-20	5.69192	5.22540	5.68517
2020-21	5.33159	5.23140	5.68517
2021-22	4.89963	5.32177	5.68517
2022-23 ^p	4.71572	5.25063	5.68517
2023-24 ^f	4.82376	5.03954	5.68517

^p = preliminary.

^f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Source: FDOC Processors Statistics database.

^b Source: CitrusBr

^c Estimated juice yield in Mexico is calculated using USDA/FAS Production, Supply and Distribution (PSD) Datasets. The yield remains unchanged from 2019-20 to present suggesting the reported yield is used to derive production estimates.

Table 5. Comparative orange juice production, Florida, São Paulo, and Mexico.

Season	Florida ^a (October - September)	São Paulo ^b (July - June)	Mexico ^c (October - September)	Total
- million SSE gallons -				
2004-05	900.6	1,959.4	103.2	2,963.2
2005-06	916.7	1,726.8	78.7	2,722.3
2006-07	807.1	1,921.8	97.5	2,826.4
2007-08	1,098.3	1,977.5	142.0	3,217.9
2008-09	1,024.7	1,761.7	146.2	2,932.6
2009-10	797.3	1,699.0	122.6	2,618.8
2010-11	854.0	1,538.8	127.3	2,520.1
2011-12	919.7	2,147.9	115.6	3,183.2
2012-13	812.3	1,685.5	210.3	2,708.1
2013-14	614.6	1,201.2	175.4	1,991.2
2014-15	540.5	1,461.0	221.4	2,223.0
2015-16	440.8	1,222.8	230.5	1,894.0
2016-17	384.1	916.1	292.4	1,592.7
2017-18	234.5	1,956.1	264.6	2,455.2
2018-19	394.3	1,242.7	306.4	1,943.3
2019-20	364.3	1,699.6	125.3	2,189.2
2020-21	263.8	1,185.1	306.4	1,755.2
2021-22	188.9	1,161.7	299.4	1,650.0
2022-23 ^p	67.5	1,337.0	245.1	1,649.5
2023-24 ^f	94.3	1,357.2	297.9	1,749.4

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Source: Florida Department of Citrus Processor Database.

^b Source: Brazilian Association of Citrus Exporters (CitrusBR)

^c Estimated juice yield in Mexico is calculated using USDA/FAS Production, Supply and Distribution (PSD) Datasets.

Table 6. Total Florida, Brazil, and Mexico OJ availability

Season	<u>Florida</u> ^a		<u>Brazil</u> ^b		<u>Mexico</u> ^c		<u>Total</u>			
	Beg. Inv.	Prod.	Beg. Inv.	Prod.	Beg. Inv.	Prod.	Beg. Inv.	Prod.	Avail	Avail Change
- million SSE gallons -										
2004-05	794.78	911.12	334.23	1,602.90	1.39	103.19	1,130.40	2,617.21	3,747.60	-11.9%
2005-06	602.80	924.46	140.65	1,726.84	2.51	78.68	745.96	2,729.98	3,475.94	-9.67%
2006-07	446.29	815.73	25.07	1,921.81	1.39	97.48	472.75	2,835.02	3,307.77	-4.84%
2007-08	363.06	1,107.55	20.89	1,977.51	1.39	142.05	385.34	3,227.11	3,612.45	9.21%
2008-09	624.16	1,034.74	231.17	1,761.66	2.79	146.22	858.12	2,942.62	3,800.75	5.21%
2009-10	672.93	806.07	239.53	1,698.99	2.79	122.55	915.25	2,627.61	3,542.86	-6.79%
2010-11	548.46	863.71	178.25	1,538.84	2.79	127.28	729.50	2,529.83	3,259.34	-8.00%
2011-12	391.23	928.39	303.12	2,147.86	2.79	115.59	697.14	3,191.83	3,888.97	19.32%
2012-13	433.56	820.90	936.70	1,685.48	-	210.28	1,370.26	2,716.66	4,086.92	5.09%
2013-14	523.57	622.41	1,083.01	1,201.17	2.29	175.36	1,608.87	1,998.93	3,607.80	-11.72%
2014-15	473.95	547.24	755.82	1,460.99	1.27	221.43	1,231.04	2,229.66	3,460.70	-4.08%
2015-16	503.16	443.59	721.69	1,222.77	2.39	230.48	1,227.24	1,896.84	3,124.07	-9.73%
2016-17	409.89	387.41	497.11	916.12	2.37	292.45	909.37	1,595.98	2,505.35	-19.80%
2017-18	368.28	236.73	151.84	1,956.07	1.67	264.60	521.80	2,457.40	2,979.20	18.91%
2018-19	357.31	396.47	484.95	1,242.68	2.79	306.38	845.05	1,945.53	2,790.57	-6.33%
2019-20	517.69	366.60	358.00	1,699.63	27.85	125.34	903.54	2,191.57	3,095.11	10.91%
2020-21	397.78	265.55	666.19	1,185.09	2.79	306.38	1,066.75	1,757.02	2,823.77	-8.77%
2021-22	347.20	189.64	448.14	1,161.74	2.79	299.41	798.12	1,650.79	2,448.91	-13.28%
2022-23p	212.95	67.47	202.35	1,336.97	2.79	245.10	418.09	1,649.55	2,067.63	-15.58%
2023-24f	170.36	94.30	119.83	1,357.17	2.79	297.91	292.98	1,749.39	2,042.36	-1.22%

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Source: Florida Department of Citrus Processor Database.

^b Source: Brazilian Association of Citrus Exporters (CitrusBR).

^c Source: USDA/FAS Production, Supply and Distribution (PSD) Datasets for Mexico; forecast applied to PSD data using industry source projections.

Table 7. Brazil orange juice exports to select regions.

Table 7: Brazil Orange juice exports to select regions.									
Season	USMCA			Europe			East Asia	All Else	Total
	Concentrate	NFC	Total	Concentrate	NFC	Total	Total	Total	
Jul - Jun	- million SSE gallons -								
2004-05	281.08	21.00	302.07	1,330.54	74.21	1,404.75	205.98	88.64	2,001.45
2005-06	223.00	24.60	247.59	1,206.68	102.90	1,309.58	231.93	115.46	1,904.56
2006-07	336.80	34.91	371.71	1,219.97	135.76	1,355.73	183.07	90.66	2,001.18
2007-08	274.35	72.80	347.15	1,051.31	157.51	1,208.83	164.23	92.22	1,812.43
2008-09	147.29	59.26	206.55	1,150.97	173.89	1,324.86	161.44	91.39	1,784.24
2009-10	200.57	60.39	260.96	1,085.01	167.50	1,252.51	189.07	89.16	1,791.70
2010-11	86.28	73.06	159.34	978.55	197.67	1,176.22	227.75	80.34	1,643.65
2011-12	149.29	67.38	216.68	970.30	173.15	1,143.45	174.90	84.96	1,619.99
2012-13	222.31	69.51	291.82	929.34	214.98	1,144.32	146.16	77.72	1,660.02
2013-14	252.62	48.96	301.58	804.02	213.92	1,017.94	135.34	84.86	1,539.71
2014-15	261.06	83.43	344.50	884.95	210.27	1,095.22	144.98	91.79	1,676.49
2015-16	191.39	88.13	279.52	898.24	228.44	1,126.68	124.76	81.90	1,612.86
2016-17	144.04	101.30	245.34	652.13	234.23	886.36	113.50	96.19	1,341.39
2017-18	290.29	154.93	445.23	806.54	228.19	1,034.74	151.06	86.68	1,717.70
2018-19	126.29	150.72	277.00	684.16	230.21	914.37	120.66	73.21	1,385.25
2019-20	134.80	111.39	246.19	840.00	234.84	1,074.85	150.74	67.86	1,539.64
2020-21	155.75	135.73	291.48	712.62	255.72	968.34	144.10	83.66	1,487.58
2021-22	121.47	161.68	283.14	669.91	219.27	889.18	164.33	74.41	1,411.06
2022-23	193.86	250.54	444.40	528.28	188.07	716.35	147.40	55.09	1,363.25

Source: FDOC-EMRD IMEX Database; Secretary of External Commerce – Brazil Comex Stat

Table 8. U.S. Imports orange juice, by origin and type.

FCOJ	2018-19	2019-20	2020-21	2021-22	2022-23
- million SSE gallons -					
Florida Ports	259,877,147	120,237,520	175,014,098	178,114,848	151,227,791
BRAZIL	65,828,582	29,623,767	57,711,921	32,850,373	63,042,454
MEXICO	161,797,022	61,128,559	91,708,575	118,417,894	64,694,864
COSTA RICA	29,706,057	25,638,906	23,870,353	25,786,273	22,379,546
BELIZE	2,327,934	3,578,647	1,449,858	102,830	2,839
Rest of World	217,551	267,641	273,390	957,478	1,108,090
Rest of US	88,513,838	83,466,244	89,606,491	81,798,725	110,517,046
BRAZIL	67,278,889	65,233,048	70,419,192	62,677,270	88,651,736
MEXICO	18,559,430	15,428,259	16,244,040	13,839,183	15,380,959
COSTA RICA	211,251	556,074	720,455	1,282,144	541,612
BELIZE			200		1379.6584
Rest of World	2,464,269	2,248,862	2,222,604	4,000,128	5,941,360
FCOJ Total	348,390,985	203,703,764	264,620,589	259,913,573	261,744,838
NFC-OJ	2018-19	2019-20	2020-21	2021-22	2022-23
Florida Ports	88,596,139	38,550,471	73,003,176	124,769,318	226,465,953
BRAZIL	76,006,369	30,400,980	56,429,047	108,008,020	210,099,845
MEXICO	12,588,534	8,123,475	16,533,163	16,512,468	15,836,416
Rest of World	1,236	26,016	40,966	248,830	529,692
Rest of US	44,799,286	49,988,471	56,111,399	55,875,578	40,537,758
BRAZIL	33,003,291	39,575,844	41,293,369	38,887,017	35,820,357
MEXICO	11,739,404	10,330,474	14,372,111	15,655,190	4,083,772
Rest of World	56,591	82,153	445,919	1,333,371	633,629
NFC-OJ Total	133,395,425	88,538,942	129,114,575	180,644,897	267,003,711

Source: FDOC-EMRD IMEX Database; U.S. Department of Commerce.

Table 9. Total Florida forecasted OJ availability, movement, and carryover for 2023-24, and actual for 2021-22 and 2022-23.

Item ^a	2021-22	2022-23p	2023-24f		
			Low ^b	Mid	High ^c
- millions 11.8° Brix gallons -					
Beginning Inventory ^a	347.2	213.0	167.8	167.8	167.8
Production ^a	192.5	67.5	94.3	94.3	94.3
Imports ^d	315.2	410.3	360.2	400.3	440.3
Other adjustments ^e	44.0	63.4	45.6	45.6	45.6
Availability	898.8	754.1	668.0	708.0	748.0
Total Movement	684.4	586.3	524.7	524.7	524.7
Domestic	643.7	566.2	524.0	524.0	524.0
Export	21.2	3.6	0.7	0.7	0.7
Ending Inventory	214.3	167.8	143.30	183.3	223.35
- weeks supply -					
Carryover	16.8	15.3	14.2	18.2	22.1

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Based on data reported by Florida Citrus processors' statistics; October-September season.

^b Projected Florida imports 10% less than middle scenario.

^c Projected Florida imports 10% more than middle scenario.

^d Foreign and domestic; Includes production by Florida Citrus processors' statistics members and an estimate of other Florida production by non-members.

^e Reprocessed tangerine juice; net loss/gain during reprocessing; and adjustments.

Table 10. Florida FCOJ forecasted availability, movement, and carryover for 2023-24, and actual for 2020-21 to 2022-23.

Item	2020-21	2021-22	2022-23p	2023-24f
FCOJ	- million SSE gallons -			
Beginning Inventory	252.33	226.17	122.19	65.51
Pack	29.37	19.74	5.96	7.16
Other Sources	214.49	185.13	178.03	198.08
Imports	211.76	185.28	173.66	190.23
FCTJ	4.00	3.70	2.64	1.87
Evap	6.40	4.39	2.10	1.47
Net loss/gain	(1.45)	(2.88)	4.80	4.50
Total FCOJ Availability	502.42	436.40	311.35	270.76
Total FCOJ Movement	276.24	314.20	245.19	213.38
By Form				
Retail	8.05	7.79	6.69	5.92
Institutional	46.61	53.78	47.82	42.37
Bulk	221.58	252.63	190.68	165.09
By Market				
Domestic	254.26	294.89	244.70	213.04
Export	21.99	19.31	2.41	0.34
Ending Inventory	226.17	122.19	79.53	57.37
Carryover	42.57	20.22	13.89	13.98

p = preliminary based on 51-weeks Florida Processor FCOJ Data.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Includes pack from specialty fruit.

^b Domestic receipts by members of non-Florida products; Florida product received by members from non-members; foreign imports; reprocessed frozen concentrated tangerine juice; chilled OJ used in FCOJ, net loss or gain during reprocessing; and adjustments.

^c Forecasted imports, FCTJ, Evap and Net loss/gain adjustments combined in October 2020 Florida Citrus Outlook.

Data source: FDOC Florida Citrus processors' statistics database.

Table 11. Florida SSOJ forecasted availability, movement, and carryover for 2023-24, and actual for 2020-21 to 2022-23.

Item ^a	2020-21	2021-22	2022-23p	2023-24f
SSOJ				
	----- million SSE gallons -----			
Beginning Inventory	145.45	121.02	90.76	102.30
Pack From Fruit	234.40	169.14	61.51	87.14
Other Sources	98.48	145.26	274.62	247.80
Imports ^b	88.86	122.53	236.67	208.27
Recon ^c	23.10	33.39	45.99	46.36
Net loss/gain	(13.48)	(10.66)	(8.04)	(6.82)
Total SSOJ Availability	478.33	435.43	426.89	437.24

Total SSOJ Movement	357.24	344.67	324.59	311.29
By Form				
Packaged	343.89	333.57	301.97	292.61
Bulk	13.35	11.10	22.61	18.68
NFC By Market				
Domestic	355.35	342.82	323.74	310.92
Export	1.90	1.85	0.85	0.37

Ending Inventory	121.09	90.76	102.30	125.95
Bulk Ending Inventory ^d	116.08	85.41	97.88	121.09

	----- weeks supply -----			
Carryover	17.6	13.7	16.4	21.0
Bulk Carryover ^d	16.9	12.9	15.7	20.2

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

Source: Florida Citrus processors' statistics.

^a Availability, movement and inventory adjusted by Florida Citrus processors' statistics to 11.8° Brix gallons.

^b Includes supplies from non-member sources and adjustments.

^c Assumes RECON movement equals pack from FCOJ.

^d Assumes bulk inventories are NFC.

Table 12. U.S. orange juice supply and disappearance.

Season	Beginning Inventory ^a	Total U.S. Production ^b	United States		Ending Inventory	Disappearance	
			Imports ^c	Exports ^{c,d}		TOTAL	Per Capita
- millions SSE gallons -							gallons
2004-05 ^a	890.0	977.7	357.5	119.1	674.9	1,431.2	5.0
2005-06	674.9	996.2	298.8	137.7	808.4	1,023.9	3.5
2006-07	808.4	896.1	399.2	122.6	651.4	1,329.7	4.5
2007-08	651.4	1,171.6	405.5	138.7	1,161.8	927.9	3.1
2008-09	1,161.8	1,066.8	317.4	124.7	1,188.3	1,233.0	4.1
2009-10	1,188.3	846.8	327.6	146.7	1,005.7	1,210.3	4.0
2010-11	1,005.7	920.2	265.2	214.2	657.7	1,319.1	4.4
2011-12	657.7	966.9	223.3	151.7	730.3	966.0	3.2
2012-13	730.3	850.7	420.5	169.4	856.2	975.8	3.2
2013-14	856.2	664.4	417.6	160.0	782.5	995.8	3.2
2014-15 ^e	782.5	590.3	458.4	113.1	525.0	1,193.0	3.8
2015-16	525.0	504.0	390.1	91.6	436.8	890.7	2.8
2016-17	436.8	420.5	416.8	72.1	378.2	823.8	2.6
2017-18	378.2	268.6	581.3	44.8	364.8	818.5	2.6
2018-19	364.8	456.0	481.8	41.9	528.2	732.5	2.3
2019-20 ^e	528.2	408.7	292.2	47.8	415.9	765.4	2.4
2020-21 ^f	421.8	316.0	393.8	43.1	371.9	716.5	2.2
2021-22 ^p	371.9	218.8	440.6	42.2	234.9	754.1	2.27
2022-23 ^p	234.9	107.3	573.6	30.4	210.8	674.5	2.01
2023-24 ^f	210.8	135.3	544.3	31.1	199.8	659.4	1.95

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Based on FCOJ inventories for the United States (National Agricultural Statistics Service, Cold Storage Reports) plus Florida SSOJ inventories (FCPS); in 2003-04 and prior years based on Florida FCOJ and SSOJ inventories (adjusted to 11.8° Brix gallons).

^b OJ production from TX and CA estimated using USDA estimates, Florida production includes estimate from non-reporting processor members.

^c U.S. Department of Commerce. Actual prior to 2019-20. Projected for September 2020-21 season.

^d FDOC processor statistics reporting exports which exceeded the volume reported by the U.S. Department of Commerce.

^e Ending inventories for a 53-week season.

^f Adjustment to non-Florida cold storage is reflected in season 2020-21 and forward.

Table 13. Florida processor OJ receipts, movement, and inventory, by type.

Season	Net from Florida Fruit ^a	Imports and Other Receipts ^{b,c}	Domestic Packaged Movement	Domestic Bulk Movement	All exports	Net change in inventory
----- million SSE gallons -----						
<u>FCOJ</u>						
2014-15	123.33	252.37	83.93	234.31	36.18	21.28
2015-16	92.78	197.77	78.72	235.29	41.96	(65.42)
2016-17	75.67	254.37	68.75	224.05	60.00	(22.75)
2017-18	42.16	304.46	64.35	214.88	15.69	51.70
2018-19	87.03	295.82	63.56	225.57	18.98	74.75
2019-20	82.04	164.78	54.17	237.55	15.16	(60.06)
2020-21	31.15	220.71	54.67	199.59	21.99	(24.38)
2021-22	20.95	190.49	61.25	233.64	19.31	(102.76)
2022-23p	5.96	183.20	54.51	187.95	2.73	(56.03)
2023-24f	8.14	198.08	48.29	165.09	0.34	(7.51)
<u>SSOJ</u>						
2014-15	423.91	34.07	407.12	28.40	8.04	14.42
2015-16	350.81	39.69	384.92	23.77	6.82	(25.01)
2016-17	311.74	59.37	356.01	25.65	5.01	(15.55)
2017-18	194.56	100.04	328.96	24.13	1.97	(60.46)
2018-19	309.44	110.30	318.16	17.30	2.21	82.06
2019-20	284.57	36.01	352.16	23.46	2.60	(57.64)
2020-21	234.40	98.48	343.89	11.45	1.90	(24.36)
2021-22	169.14	145.26	333.57	9.25	1.85	(30.26)
2022-23p	61.51	283.48	302.12	19.28	0.81	22.78
2023-24f	87.14	249.27	292.61	18.68	0.37	24.74

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a FCOJ includes an estimate of non-reporting processor pound solids.

^b FCOJ other receipts includes net loss/gain in production, evaporated SSOJ, and concentrated tangerine juice used in FCOJ.

^c SSOJ other receipts includes net loss/gain in production, reconned FCOJ used in SSOJ, and is less evaporated SSOJ

Florida Department of Citrus; processor database.

Table 14. Retail orange juice sales.

Season	NFC	RECON	FCOJ	Other	TOTAL
Volume^b					
----- million SSE gallons -----					
2014-15	292.1	175.9	21.2	0.6	489.8
2015-16	283.2	160.5	19.4	0.4	463.4
2016-17	265.4	148.7	18.1	0.3	432.4
2017-18 ^c	254.4	136.9	16.4	12.2	419.8
2018-19	231.0	136.0	14.7	12.6	394.2
2019-20	263.5	150.9	17.9	13.1	445.4
2020-21	260.3	137.5	15.1	14.7	427.6
2021-22	244.5	135.0	14.7	13.3	407.5
2022-23^p	196.4	135.8	13.3	11.8	357.4
2023-24^f					
High Price	165.7	113.5	11.1	9.8	300.1
Mid-Price	174.4	118.6	11.8	10.5	315.2
Low Price	183.1	123.8	12.4	11.1	330.4
Price^b					
----- \$ per SSE gallon -----					
2014-15	7.63	4.95	4.96	9.11	6.55
2015-16	7.56	4.92	4.91	8.95	6.51
2016-17	7.67	5.15	4.93	8.67	6.69
2017-18 ^c	7.92	4.97	5.07	7.45	6.83
2018-19	8.40	4.88	5.06	7.42	7.03
2019-20	8.62	4.86	5.13	7.31	7.17
2020-21	8.81	4.86	5.13	7.62	7.37
2021-22	9.48	5.31	5.33	8.21	7.91
2022-23^p	10.35	6.82	5.99	9.15	8.81
2023-24^f					
High Price	10.61	7.01	6.16	9.57	9.05
Mid-Price	10.52	6.96	6.18	9.47	8.98
Low Price	10.43	6.91	6.19	9.39	8.92

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Based on an analysis of trends to estimate remaining two periods for the season. Nothing herein is meant to imply minimum pricing, nor FDOC staff opinion on optimal pricing.

^b Data source: Nielsen Answers on Demand, Expanded All Outlets Combined; FDOC Custom database. Grocery stores \$2 million+, mass merchandisers, Walmart discount stores and supercenters, club stores, dollar stores, drug stores \$1 million+, and military/Defense Commissary Agency (DeCA).

^c Routine maintenance of the FDOC Custom database revealed several items (UPCs) were categorized as Recon OJ instead of shelf stable OJ. The database was refreshed in January 2019 altering the totals for the 2017-18 season forward.

Table 15. Share of 100% orange juice sold on promotion with reported price, by type

Season	2019-20	2020-21	2021-22	2022-23p
Share - Any Promo^a	----- % of total sales -----			
NFC	30.4%	28.5%	27.6%	28.9%
RECON	21.4%	22.1%	24.6%	24.5%
TOTAL	26.0%	25.0%	25.4%	26.0%
Share - No Promo	----- % of total sales -----			
NFC	69.6%	71.5%	72.4%	71.1%
RECON	78.6%	77.9%	75.4%	75.5%
TOTAL	74.0%	75.0%	74.6%	74.0%
Any Promo Price	----- \$ per SSE gallon -----			
NFC	\$7.93	\$8.13	\$8.61	\$9.36
RECON	\$4.27	\$4.33	\$4.65	\$6.50
TOTAL	\$6.83	\$6.99	\$7.26	\$8.25
No Promo Price	----- \$ per SSE gallon -----			
NFC	\$8.93	\$9.09	\$9.81	\$10.75
RECON	\$5.03	\$5.01	\$5.52	\$6.92
TOTAL	\$7.29	\$7.50	\$8.13	\$9.00

^aShare sold on promotion include feature items, display items, a combination of both feature and display, and temporary price reductions (also known as price decrease). Information is reported for informational purposes. Outlook projections of retail sales are not disaggregated by promotional activity.

Data source: Nielsen Answers on Demand, Expanded All Outlets Combined; FDOC Custom database.

Table 16. Destination markets for Florida certified fresh orange shipments.

Season	Exports		Domestic				TOTAL ^b	
(Aug-July)	Overseas ^a	Canada	South	Northeast	Central	West		
----- million 45-pound cartons -----								90-lb boxes
2004-05	0.42	0.57	3.99	3.37	1.21	0.24	9.81	4.90
2005-06	0.15	0.54	4.03	3.14	1.04	0.16	9.06	4.53
2006-07	0.12	0.56	4.51	3.11	1.26	0.04	9.59	4.80
2007-08	0.28	0.49	3.91	2.91	0.97	0.01	8.58	4.29
2008-09	0.25	0.59	4.69	3.97	1.30	0.02	10.83	5.41
2009-10	0.19	0.55	3.83	3.17	0.95	0.03	8.73	4.36
2010-11	0.14	0.55	3.70	3.22	1.03	0.04	8.69	4.35
2011-12	0.09	0.51	3.93	3.27	1.22	0.06	9.08	4.54
2012-13	0.12	0.57	3.92	3.16	1.21	0.04	9.02	4.51
2013-14	0.12	0.53	3.35	2.81	1.28	0.03	8.13	4.06
2014-15	0.06	0.65	3.09	2.68	1.33	0.03	7.83	3.92
2015-16	0.13	0.50	2.29	1.97	1.10	0.02	6.02	3.01
2016-17	0.03	0.39	1.51	1.61	0.82	0.02	4.38	2.19
2017-18	0.02	0.34	1.64	1.57	1.05	0.05	4.67	2.33
2018-19	0.04	0.27	1.54	1.66	1.08	0.04	4.63	2.32
2019-20	0.02	0.24	2.38	2.00	1.27	0.04	5.96	2.98
2020-21	0.03	0.19	2.66	1.74	1.27	0.21	6.09	3.05
2021-22	0.02	0.15	1.96	1.47	1.23	0.06	4.89	2.45
2022-23p	0.01	0.09	1.14	0.92	0.79	0.03	2.98	1.49
2023-24f	0.01	0.09	1.15	0.82	0.66	0.06	2.78	1.39

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

Source: Division of Fruit and Vegetable Inspection Service, Florida Department of Agriculture.

a Includes some offshore exports not destined for Europe.

b May not add up due to rounding.

Table 17. Utilization of Florida grapefruit.

Season	Volume					
	Fresh	FCGJ	SSGJ	Non-Certified	Other ^a	TOTAL
----- millions 85-lb boxes -----						
2004-05	6.70	2.47	2.76	0.71	0.15	12.80
2005-06	6.24	8.00	4.12	0.68	0.26	19.30
2006-07	10.31	11.56	4.43	0.65	0.25	27.20
2007-08	9.91	10.45	5.20	0.71	0.33	26.60
2008-09	8.68	8.42	3.70	0.66	0.23	21.70
2009-10	8.71	6.04	4.59	0.65	0.32	20.30
2010-11	7.73	7.01	4.18	0.66	0.18	19.75
2011-12	7.25	6.87	3.83	0.68	0.22	18.85
2012-13	7.14	6.10	4.23	0.70	0.18	18.35
2013-14	6.05	4.73	4.05	0.50	0.32	15.65
2014-15	5.27	3.83	3.16	0.44	0.19	12.90
2015-16	4.54	2.77	3.04	0.41	0.04	10.80
2016-17	3.25	1.81	2.36	0.25	0.09	7.76
2017-18	1.62	0.54	1.54	0.12	0.06	3.88
2018-19	1.79	0.60	1.97	0.14	0.01	4.51
2019-20	2.04	0.47	2.24	0.09	<0.001	4.85
2020-21	1.89	0.31	1.79	0.10	0.01	4.10
2021-22	1.76	0.20	1.33	0.07	<0.001	3.33
2022-23 ^p	1.04	<0.00	0.68	0.03	0.06	1.81
2023-24 ^f	1.08	<0.00	0.78	0.04	<0.00	1.90

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

Table 18. Florida FCGJ and SSGF availability, movement, and carryover for 2020-21, and actual for 2021-22 through 2022-23.

Item	2020-21	2021-22	2022-23p	2023-24f
<u>FCGJ</u>		--- millions SSE gallons ---		
Beginning Inventory	8.48	6.58	4.21	3.35
Pack From Fruit	1.48	1.02	<0.00	<0.00
Imports and other adjustments ^a	1.05	0.84	0.85	0.76
Total FCGJ Availability	<u>11.01</u>	<u>8.43</u>	<u>5.21</u>	<u>3.44</u>
Movement	<u>4.44</u>	<u>4.22</u>	<u>1.87</u>	<u>0.71</u>
Ending Inventory	6.58	4.21	3.35	1.14
Carryover (weeks supply)	77.1	51.8	93.0	83.1
<u>SSGJ^c</u>		--- Million SSE gallons ---		
Beginning Inventory	10.98	10.32	8.45	6.22
Pack from Fruit ^a	9.08	7.25	3.28	4.09
Imports/Dom Receipts ^b	<u>2.18</u>	<u>3.58</u>	<u>5.69</u>	<u>4.63</u>
Total SSGJ Availability	<u>22.24</u>	<u>21.16</u>	<u>17.43</u>	<u>14.91</u>
Movement – NFC	11.78	11.98	11.04	10.57
Movement– RECON/EVAP ^{d,e}	0.42	0.98	0.46	0.28
Total SSGJ Movement	<u>12.04</u>	<u>12.71</u>	<u>11.21</u>	<u>10.60</u>
Bulk Ending Inventory	10.04	8.19	5.92	4.06
		--- Weeks supply ---		
Bulk Carryover ^f	44.1	34.6	28.9	21.1
<u>TOTAL GJ</u>				
Beginning Inventory	19.46	16.90	12.66	9.57
Production and Imports ^a	<u>13.43</u>	<u>13.07</u>	<u>9.72</u>	<u>8.90</u>
Total GJ Availability	<u>32.90</u>	<u>29.97</u>	<u>22.37</u>	<u>18.47</u>
Movement- Domestic	14.32	15.30	12.89	11.25
Movement- Export	1.90	0.91	0.03	0.03
Total GJ Movement	<u>16.22</u>	<u>16.21</u>	<u>12.92</u>	<u>11.28</u>
Bulk Ending Inventory	17.00	12.66	9.73	7.19
		--- Weeks supply ---		
Carryover	54.5	42.9	39.2	33.1

p = preliminary. f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

Source: FDOC Florida Citrus processors' statistics database.

^a Includes adjustments and pack from reprocessed FCGJ.

^b Includes domestic receipts of non-Florida product, receipts of Florida product from non-member processors, and receipts from foreign sources

^c Availability, movement and inventory adjusted by FCPS to 10.0° Brix gallons.

^d Rounds to zero on FPS Weekly Report.

^e Assumes RECON movement equals pack from FCGJ.

^f Includes packaged

Table 19. U.S. grapefruit juice production, supply, and disappearance.

Season	United States ^a					Disappearance	
	Beg Inv	Prod ^b	Imports	Exports ^c _d	End Inv	TOTAL	Per Capita
Millions SSE gallons							
2004-05 ^f	72.1	53.2	11.4	27.6	35.9	73.1	0.25
2005-06	36.0	81.3	5.6	21.6	44.8	56.5	0.19
2006-07	44.8	124.7	0.9	42.9	62.6	64.9	0.22
2007-08	62.6	113.9	0.3	40.5	64.9	71.4	0.23
2008-09 ^e	64.9	88.3	0.5	37.1	50.4	66.1	0.22
2009-10	50.4	82.0	0.6	24.7	45.8	62.5	0.20
2010-11	45.8	87.3	0.4	32.8	35.6	65.1	0.21
2011-12	35.6	81.7	0.5	23.8	39.5	54.5	0.17
2012-13	39.5	78.5	0.8	22.7	36.8	59.3	0.19
2013-14	36.8	67.1	0.3	18.2	35.9	50.1	0.16
2014-15 ^e	35.9	51.6	0.4	16.0	29.7	42.2	0.13
2015-16	29.7	45.8	0.8	11.1	27.7	37.6	0.12
2016-17	27.7	37.9	2.8	8.6	21.0	38.7	0.12
2017-18	21.0	23.7	6.7	6.8	14.0	30.6	0.09
2018-19	14.0	38.9	12.3	5.9	17.8	41.5	0.13
2019-20 ^e	17.8	30.3	5.0	5.0	19.5	28.7	0.09
2020-21 ^g	19.5	18.4	2.7	4.9	23.5	18.9	0.06
2021-22	23.5	22.0	4.0	5.1	15.3	29.2	0.09
2022-23 ^p	15.3	14.3	8.6	3.6	10.5	24.0	0.07
2023-24 ^f	10.5	13.9	9.1	3.9	7.7	21.8	0.07

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Estimated as U.S. production plus imports minus exports plus beginning inventory minus ending inventory. Prior to 2019-20 season, presumed consumption estimates may have included cold storage outside of Florida. As of 2021-22, estimates of non-Florida processor cold storage incorporated into beginning and ending inventory.

^b GJ production from TX and CA estimated using USDA estimates, Florida production includes estimate from non-reporting processor members.

^c U.S. Department of Commerce, except for exports in 2002-03, 2003-04, and 2006-07 through 2010-11.

^d FDOC processor statistics reporting exports which exceeded the volume reported by the U.S. Department of Commerce.

^e Ending inventories for a 53-week season.

^f 2004-05 and thereafter Florida bulk NFC inventory and production adjusted by FCPS to 10.0° Brix gallons.

^g Production and inventory adjustments may have reduced actual Disappearance measure by approximately 5 million gallons.

Table 20. Retail grapefruit juice sales.

Season	Refrig. NFC	Refrig. RECON	Shelf Stable	FCGJ/Other	TOTAL
Volume					
-----million SSE gallons -----					
2014-15	9.67	0.98	4.02	0.18	14.85
2015-16	9.29	0.98	3.91	0.20	14.38
2016-17 ^b	9.20	0.84	3.77	0.13	13.94
2017-18 ^b	9.01	0.47	3.76	0.09	13.34
2018-19 ^{b,c}	8.46	0.10	2.99	0.39	11.95
2019-20 ^{b,c}	8.91	0.15	2.99	0.47	12.52
2020-21	8.47	0.18	2.97	0.42	12.04
2021-22	8.21	0.20	2.54	0.46	11.41
2022-23^p	7.43	0.18	2.77	0.31	10.70
2023-24^f					
High Price	5.84	0.15	2.22	0.24	8.45
Mid Price	6.09	0.15	2.29	0.26	8.79
Low Price	6.36	0.16	2.37	0.28	9.16
Price					
----- \$ per SSE gallon -----					
2014-15	7.86	6.21	6.43	\$4.96	7.33
2015-16	7.86	6.46	6.39	\$4.92	7.32
2016-17 ^b	7.81	8.36	6.28	\$4.93	7.39
2017-18 ^b	8.35	6.97	6.22	\$5.07	7.68
2018-19 ^{b,c}	8.95	16.32	6.79	\$5.06	8.33
2019-20 ^{b,c}	9.27	18.16	7.41	\$5.13	8.73
2020-21	9.49	19.12	7.73	\$5.13	9.03
2021-22	10.01	19.97	8.71	\$5.33	9.73
2022-23^p	10.60	21.95	9.05	\$5.99	10.32
2023-24^f					
High Price	11.21	23.46	9.59	8.45	10.92
Mid Price	10.89	22.78	9.31	8.20	10.60
Low Price	10.56	22.09	9.03	7.96	10.29

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Based on an analysis of trends. Nothing herein is meant to imply minimum pricing, nor FDOC staff opinion on optimal pricing.

^b Data source: Nielsen Answers on Demand, Expanded All Outlets Combined; FDOC Custom database. Grocery stores \$2 million+, mass merchandisers, Walmart discount stores and supercenters, club stores, dollar stores, drug stores \$1 million+, and military/Defense Commissary Agency (DeCA).

^c One or more refrigerated recon products, as indicated by UPCs in the FDOC custom database, were confirmed as discontinued leading to a significant drop in volume for the category. The volume remaining recon products reflects equivalent gallons of small container sizes which would indicate a significant increase in price.

Table 21. Share of 100% grapefruit juice sold on promotion with reported price, by type.

Season	2019-20	2020-21	2021-22	2022-23
Share - Any promo^a	----- % of total sales -----			
NFC	34.1%	31.4%	29.1%	31.6%
RECON	8.0%	6.2%	5.2%	9.1%
TOTAL	27.1%	24.3%	23.3%	25.4%
Share - No Promo	----- % of total sales -----			
NFC	65.9%	68.6%	70.9%	68.4%
RECON	92.0%	94.0%	94.8%	90.9%
TOTAL	72.9%	75.7%	76.7%	74.6%
Any Promo Price	----- \$ per SSE gallon -----			
NFC	\$8.00	\$8.21	\$8.49	\$8.92
RECON	\$7.51	\$9.09	\$10.95	\$10.21
TOTAL	\$7.92	\$8.27	\$8.64	\$9.06
No Promo Price	----- \$ per SSE gallon -----			
NFC	\$9.93	\$10.07	\$10.64	\$11.38
RECON	\$7.40	\$7.66	\$8.59	\$8.93
TOTAL	\$9.03	\$9.27	\$10.06	\$10.74

^aShare sold on promotion include feature items, display items, a combination of both feature and display, and temporary price reductions (also known as price decrease). Information is reported for informational purposes. Outlook projections of retail sales are not disaggregated by promotional activity.

Data source: Nielsen Answers on Demand, Expanded All Outlets Combined; FDOC Custom database.

Table 22. Destination markets for Florida certified fresh grapefruit.

Season (Aug-July)	Domestic	Exports				TOTAL ^b	
		Canada	Europe ^a	Far East	Total Exports ^b		
	----- million 42½-pound cartons -----						million 85-lb box equivalent
2004-05	4.90	0.80	2.80	5.00	8.60	13.50	6.75
2005-06	4.80	0.80	2.10	4.80	7.70	12.50	6.25
2006-07	6.75	1.28	4.40	8.20	13.87	20.62	10.31
2007-08	6.20	1.20	5.00	7.50	13.70	19.90	9.95
2008-09	6.05	1.09	3.92	6.30	11.31	17.35	8.68
2009-10	6.11	1.15	3.46	6.71	11.31	17.42	8.71
2010-11	5.40	1.10	3.12	5.84	10.06	15.46	7.73
2011-12	5.53	0.99	2.80	5.17	8.96	14.49	7.25
2012-13	5.99	1.09	2.92	4.28	8.28	14.27	7.14
2013-14	5.13	0.99	2.61	3.39	6.98	12.11	6.05
2014-15	4.44	0.81	2.24	3.06	6.11	10.55	5.27
2015-16	3.79	0.65	1.93	2.70	5.28	9.07	4.54
2016-17	2.66	0.42	1.42	1.99	3.83	6.49	3.25
2017-18	1.51	0.22	0.61	0.90	1.73	3.24	1.62
2018-19	1.87	0.30	0.52	0.88	1.70	3.57	1.78
2019-20	2.24	0.31	0.71	0.83	1.85	4.09	2.04
2020-21	2.45	0.22	0.52	0.57	1.33	3.78	1.89
2021-22	2.60	0.16	0.42	0.32	0.92	3.52	1.76
2022-23p	1.71	0.10	0.18	0.07	0.36	2.07	1.04
2023-24f	1.70	0.11	0.22	0.14	0.47	2.17	1.08

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

^a Total exports figure includes certain offshore exports shipped to destinations other than Canada, Europe, or the Far East.

^b May not add up due to rounding.

Source: Division of Fruit and Vegetable Inspection Service, Florida Department of Agriculture

Table 23. Utilization of Florida fresh specialty.

Season	Fresh	Non-Certified	Processed	Total
----- millions 90-pound boxes -----				
2004-05	3.81	0.29	2.19	6.00
2005-06	4.16	0.34	2.75	6.90
2006-07	3.50	0.37	2.35	5.85
2007-08	3.71	0.31	3.29	7.00
2008-09	3.34	0.35	1.66	5.00
2009-10	3.43	0.38	1.92	5.35
2010-11	3.45	0.40	2.35	5.80
2011-12	3.27	0.39	2.17	5.44
2012-13	2.69	0.31	1.60	4.28
2013-14	2.34	0.33	1.44	3.78
2014-15	1.92	0.18	1.56	3.48
2015-16	1.13	-	0.70	1.82
2016-17 ^b	0.85	-	0.77	1.62
2017-18	0.49	-	0.26	0.75
2018-19	0.54	-	0.45	0.99
2019-20	0.64	-	0.38	1.02
2020-21	0.60	0.05	0.29	0.89
2021-22	0.48	0.05	0.27	0.75
2022-23 ^p	0.32	0.01	0.15	0.48
2023-24 ^f	0.34	0.04	0.13	0.50

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

a Processed boxes are utilized for orange juice, except some tangerines utilized to 100% produce tangerine juice.

b Starting in the 2016-17 season, Royal tangerines (formerly Temple) reported with specialty.

Table 24. Destination markets for Florida certified fresh specialty shipments.

Season	Exports		Domestic				TOTAL ^b	
(Aug- July)	Overseas	Canada	South	Northeast	Central	West		
----- million 45-pound cartons -----								
2004-05	0.09	0.34	2.43	2.19	1.12	0.87	7.05	3.52
2005-06	0.09	0.39	2.75	2.35	1.17	0.88	7.63	3.81
2006-07	0.01	0.43	2.55	2.14	1.29	0.20	6.61	3.30
2007-08	0.01	0.41	2.82	2.47	1.20	0.16	7.07	3.53
2008-09	0.00	0.33	2.40	2.22	1.16	0.14	6.25	3.12
2009-10	0.05	0.33	2.45	1.97	0.95	0.60	6.35	3.17
2010-11	0.10	0.30	2.47	1.96	0.99	0.55	6.36	3.18
2011-12	0.04	0.24	2.42	1.82	0.89	0.55	5.95	2.98
2012-13	0.05	0.21	2.04	1.48	0.72	0.42	4.93	2.46
2013-14	0.03	0.16	1.70	1.33	0.62	0.37	4.20	2.10
2014-15	0.03	0.13	1.53	1.19	0.48	0.26	3.61	1.80
2015-16	0.01	0.06	0.99	0.81	0.32	0.17	2.37	1.19
2016-17	0.02	0.04	0.72	0.61	0.20	0.13	1.72	0.86
2017-18	0.00	0.01	0.41	0.30	0.09	0.05	0.87	0.43
2018-19	0.01	0.03	0.48	0.31	0.09	0.06	0.98	0.49
2019-20	0.01	0.03	0.58	0.31	0.11	0.11	1.14	0.57
2020-21	0.01	0.02	0.63	0.23	0.08	0.12	1.10	0.55
2021-22	0.01	0.01	0.55	0.17	0.06	0.07	0.88	0.44
2022-23p	<0.00	<0.01	0.42	0.13	0.04	0.06	0.65	0.32
2023-24f	0.01	0.01	0.41	0.14	0.05	0.06	0.67	0.34

p = preliminary.

f = Forecast (based on the USDA production forecast for 2023-24 season released on October 12, 2023).

Source: Division of Fruit and Vegetable Inspection Service, Florida Department of Agriculture.

a Includes some offshore exports not destined for Europe.

b May not add up due to rounding.

