# Crop Production

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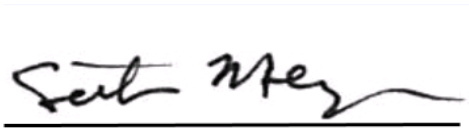
## Orange Production Up Less Than 1 Percent from March Forecast

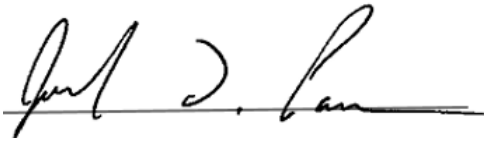
**The United States all orange** forecast for the 2021-2022 season is 3.79 million tons, up less than 1 percent from the previous forecast but down 14 percent from the revised 2020-2021 utilization. The Florida all orange forecast, at 38.2 million boxes (1.72 million tons), is down 7 percent from the previous forecast and down 28 percent from last season's revised utilization. In Florida, early, midseason, and Navel varieties are forecast at 18.2 million boxes (819,000 tons), unchanged from the previous forecast but down 20 percent from last season's final utilization. The Florida Valencia orange forecast, at 20.0 million boxes (900,000 tons), is down 13 percent from the previous forecast and down 34 percent from last season's revised utilization.

The California all orange forecast is 51.3 million boxes (2.05 million tons), is up 8 percent from previous forecast and up 5 percent from last season's revised final utilization. The California Navel orange forecast is 43.0 million boxes (1.72 million tons), is up 10 percent from the previous forecast and up 4 percent from last season's revised final utilization. The California Valencia orange forecast is 8.30 million boxes (332,000 tons), is down 3 percent from the previous forecast but up 8 percent from last season's revised final utilization. The Texas all orange forecast, at 350,000 boxes (15,000 tons), is down 13 percent from the previous forecast and down 67 percent from last season's final utilization.

This report was approved on April 8, 2022.



Secretary of Agriculture
Designate
Seth Meyer



Agricultural Statistics Board
Chairperson
Joseph L. Parsons

## Contents

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## Utilized Production of Citrus Fruits by Crop – States and United States: 2020-2021 and Forecasted April 1, 2022

[The crop year begins with the bloom of the first year shown and ends with the completion of harvest the following year]

| Crop and State | Utilized production boxes [1] | | Utilized production ton equivalent | |
|---|---|---|---|---|
| | 2020-2021 | 2021-2022 | 2020-2021 | 2021-2022 |
| | (1,000 boxes) | (1,000 boxes) | (1,000 tons) | (1,000 tons) |
| **Oranges** | | | | |
| California, all | 49,000 | 51,300 | 1,960 | 2,052 |
| Early, mid, and Navel [2] | 41,300 | 43,000 | 1,652 | 1,720 |
| Valencia | 7,700 | 8,300 | 308 | 332 |
| Florida, all | 52,950 | 38,200 | 2,383 | 1,719 |
| Early, mid, and Navel [2] | 22,700 | 18,200 | 1,022 | 819 |
| Valencia | 30,250 | 20,000 | 1,361 | 900 |
| Texas, all | 1,050 | 350 | 45 | 15 |
| Early, mid, and Navel [2] | 1,000 | 250 | 43 | 11 |
| Valencia | 50 | 100 | 2 | 4 |
| United States, all | 103,000 | 89,850 | 4,388 | 3,786 |
| Early, mid, and Navel [2] | 65,000 | 61,450 | 2,717 | 2,550 |
| Valencia | 38,000 | 28,400 | 1,671 | 1,236 |
| **Grapefruit** | | | | |
| California | 4,200 | 4,100 | 168 | 164 |
| Florida | 4,100 | 3,600 | 174 | 153 |
| Texas | 2,400 | 2,000 | 96 | 80 |
| United States | 10,700 | 9,700 | 438 | 397 |
| **Tangerines and mandarins** [3] | | | | |
| California | 28,800 | 21,000 | 1,152 | 840 |
| Florida | 890 | 800 | 42 | 38 |
| United States | 29,690 | 21,800 | 1,194 | 878 |
| **Lemons** | | | | |
| Arizona | 750 | 1,500 | 30 | 60 |
| California | 20,100 | 23,000 | 804 | 920 |
| United States | 20,850 | 24,500 | 834 | 980 |

[1] Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California-80, Florida-85, Texas-80; tangerines and mandarins in California-80, Florida-95; lemons-80.
[2] Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas.
[3] Includes tangelos and tangors.

## Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2021 and 2022

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2022 crop year. Blank data cells indicate estimation period has not yet begun]

| Crop | Area planted | | Area harvested | |
|---|---|---|---|---|
| | 2021 | 2022 | 2021 | 2022 |
| | (1,000 acres) | (1,000 acres) | (1,000 acres) | (1,000 acres) |
| **Grains and hay** | | | | |
| Barley | 2,660 | 2,941 | 1,948 | |
| Corn for grain [1] | 93,357 | 89,490 | 85,388 | |
| Corn for silage | (NA) | | 6,481 | |
| Hay, all | (NA) | (NA) | 50,736 | 50,332 |
| Alfalfa | (NA) | | 15,246 | |
| All other | (NA) | | 35,490 | |
| Oats | 2,550 | 2,547 | 650 | |
| Proso millet | 725 | | 662 | |
| Rice | 2,532 | 2,452 | 2,488 | |
| Rye | 2,133 | | 294 | |
| Sorghum for grain [1] | 7,305 | 6,205 | 6,490 | |
| Sorghum for silage | (NA) | | 331 | |
| Wheat, all | 46,703 | 47,351 | 37,163 | |
| Winter | 33,648 | 34,236 | 25,464 | |
| Durum | 1,635 | 1,915 | 1,534 | |
| Other spring | 11,420 | 11,200 | 10,165 | |
| **Oilseeds** | | | | |
| Canola | 2,152.0 | 2,158.0 | 2,089.0 | |
| Cottonseed | (X) | | (X) | |
| Flaxseed | 325 | 360 | 268 | |
| Mustard seed | 103.0 | | 89.3 | |
| Peanuts | 1,585.2 | 1,571.0 | 1,545.0 | |
| Rapeseed | 14.3 | | 12.5 | |
| Safflower | 152.0 | | 135.0 | |
| Soybeans for beans | 87,195 | 90,955 | 86,332 | |
| Sunflower | 1,288.5 | 1,416.0 | 1,243.8 | |
| **Cotton, tobacco, and sugar crops** | | | | |
| Cotton, all | 11,219.5 | 12,234.0 | 9,968.3 | |
| Upland | 11,093.0 | 12,058.0 | 9,844.5 | |
| American Pima | 126.5 | 176.0 | 123.8 | |
| Sugarbeets | 1,160.0 | 1,143.4 | 1,107.6 | |
| Sugarcane | (NA) | | 935.2 | |
| Tobacco | (NA) | (NA) | 218.9 | 226.3 |
| **Dry beans, peas, and lentils** | | | | |
| Chickpeas | 368.5 | 303.6 | 351.0 | |
| Dry edible beans | 1,394.0 | 1,313.0 | 1,335.6 | |
| Dry edible peas | 977.0 | 1,088.0 | 834.0 | |
| Lentils | 708.0 | 788.0 | 549.0 | |
| **Potatoes and miscellaneous** | | | | |
| Hops | (NA) | | 60.9 | |
| Maple syrup | (NA) | | (NA) | |
| Mushrooms | (NA) | | (NA) | |
| Peppermint oil | (NA) | | 44.0 | |
| Potatoes | 943.0 | | 935.7 | |
| Spearmint oil | (NA) | | 14.9 | |

See footnote(s) at end of table.

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## Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2021 and 2022 (continued)

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2022 crop year. Blank data cells indicate estimation period has not yet begun]

| Crop | Yield per acre | | Production | |
|---|---|---|---|---|
| | 2021 | 2022 | 2021 | 2022 |
| | | | (1,000) | (1,000) |
| **Grains and hay** | | | | |
| Barley ..... bushels | 60.4 | | 117,673 | |
| Corn for grain ..... bushels | 177.0 | | 15,115,170 | |
| Corn for silage ..... tons | 20.1 | | 130,317 | |
| Hay, all ..... tons | 2.37 | | 120,196 | |
| Alfalfa ..... tons | 3.23 | | 49,245 | |
| All other ..... tons | 2.00 | | 70,951 | |
| Oats ..... bushels | 61.3 | | 39,836 | |
| Proso millet ..... bushels | 23.2 | | 15,376 | |
| Rice [2] ..... cwt | 7,709 | | 191,796 | |
| Rye ..... bushels | 33.4 | | 9,808 | |
| Sorghum for grain ..... bushels | 69.0 | | 447,810 | |
| Sorghum for silage ..... tons | 15.4 | | 5,083 | |
| Wheat, all ..... bushels | 44.3 | | 1,645,764 | |
| Winter ..... bushels | 50.2 | | 1,277,365 | |
| Durum ..... bushels | 24.3 | | 37,259 | |
| Other spring ..... bushels | 32.6 | | 331,140 | |
| **Oilseeds** | | | | |
| Canola ..... pounds | 1,302 | | 2,720,550 | |
| Cottonseed ..... tons | (X) | | 5,377.0 | |
| Flaxseed ..... bushels | 10.1 | | 2,708 | |
| Mustard seed ..... pounds | 491 | | 43,834 | |
| Peanuts ..... pounds | 4,135 | | 6,389,300 | |
| Rapeseed ..... pounds | 1,809 | | 22,616 | |
| Safflower ..... pounds | 1,001 | | 135,175 | |
| Soybeans for beans ..... bushels | 51.4 | | 4,435,232 | |
| Sunflower ..... pounds | 1,530 | | 1,902,985 | |
| **Cotton, tobacco, and sugar crops** | | | | |
| Cotton, all [2] ..... bales | 849 | | 17,624.0 | |
| Upland [2] ..... bales | 841 | | 17,257.0 | |
| American Pima [2] ..... bales | 1,423 | | 367.0 | |
| Sugarbeets ..... tons | 33.2 | | 36,751 | |
| Sugarcane ..... tons | 35.1 | | 32,838 | |
| Tobacco ..... pounds | 2,183 | | 477,973 | |
| **Dry beans, peas, and lentils** | | | | |
| Chickpeas [2] ..... cwt | 815 | | 2,861 | |
| Dry edible beans [2] ..... cwt | 1,701 | | 22,721 | |
| Dry edible peas [2] ..... cwt | 1,025 | | 8,549 | |
| Lentils [2] ..... cwt | 606 | | 3,327 | |
| **Potatoes and miscellaneous** | | | | |
| Hops ..... pounds | 1,900 | | 115,630.9 | |
| Maple syrup ..... gallons | (NA) | | 3,424 | |
| Mushrooms ..... pounds | (NA) | | 757,987 | |
| Peppermint oil ..... pounds | 104 | | 4,566 | |
| Potatoes ..... cwt | 438 | | 409,671 | |
| Spearmint oil ..... pounds | 119 | | 1,775 | |

(NA) Not available.
(X) Not applicable.
[1] Area planted for all purposes.
[2] Yield in pounds.

## Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2021 and 2022

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2022 crop year. Blank data cells indicate estimation period has not yet begun]

| Crop | Area planted | | Area harvested | |
|---|---|---|---|---|
| | 2021 | 2022 | 2021 | 2022 |
| | (hectares) | (hectares) | (hectares) | (hectares) |
| **Grains and hay** | | | | |
| Barley | 1,076,480 | 1,190,190 | 788,340 | |
| Corn for grain [1] | 37,780,640 | 36,215,710 | 34,555,670 | |
| Corn for silage | (NA) | | 2,622,800 | |
| Hay, all [2] | (NA) | (NA) | 20,532,350 | 20,368,860 |
| Alfalfa | (NA) | | 6,169,900 | |
| All other | (NA) | | 14,362,450 | |
| Oats | 1,031,960 | 1,030,750 | 263,050 | |
| Proso millet | 293,400 | | 267,900 | |
| Rice | 1,024,680 | 992,300 | 1,006,870 | |
| Rye | 863,200 | | 118,980 | |
| Sorghum for grain [1] | 2,956,260 | 2,511,100 | 2,626,440 | |
| Sorghum for silage | (NA) | | 133,950 | |
| Wheat, all [2] | 18,900,240 | 19,162,480 | 15,039,490 | |
| Winter | 13,617,010 | 13,854,970 | 10,305,030 | |
| Durum | 661,670 | 774,980 | 620,790 | |
| Other spring | 4,621,560 | 4,532,530 | 4,113,670 | |
| **Oilseeds** | | | | |
| Canola | 870,890 | 873,320 | 845,400 | |
| Cottonseed | (X) | | (X) | |
| Flaxseed | 131,520 | 145,690 | 108,460 | |
| Mustard seed | 41,680 | | 36,140 | |
| Peanuts | 641,510 | 635,770 | 625,250 | |
| Rapeseed | 5,790 | | 5,060 | |
| Safflower | 61,510 | | 54,630 | |
| Soybeans for beans | 35,286,940 | 36,808,580 | 34,937,700 | |
| Sunflower | 521,440 | 573,040 | 503,350 | |
| **Cotton, tobacco, and sugar crops** | | | | |
| Cotton, all [2] | 4,540,420 | 4,950,980 | 4,034,070 | |
| Upland | 4,489,230 | 4,879,750 | 3,983,970 | |
| American Pima | 51,190 | 71,230 | 50,100 | |
| Sugarbeets | 469,440 | 462,720 | 448,230 | |
| Sugarcane | (NA) | | 378,470 | |
| Tobacco | (NA) | (NA) | 88,600 | 91,580 |
| **Dry beans, peas, and lentils** | | | | |
| Chickpeas | 149,130 | 122,860 | 142,050 | |
| Dry edible beans | 564,140 | 531,360 | 540,500 | |
| Dry edible peas | 395,380 | 440,300 | 337,510 | |
| Lentils | 286,520 | 318,900 | 222,170 | |
| **Potatoes and miscellaneous** | | | | |
| Hops | (NA) | | 24,630 | |
| Maple syrup | (NA) | | (NA) | |
| Mushrooms | (NA) | | (NA) | |
| Peppermint oil | (NA) | | 17,810 | |
| Potatoes | 381,620 | | 378,670 | |
| Spearmint oil | (NA) | | 6,030 | |

See footnote(s) at end of table.

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## Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2021 and 2022 (continued)

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2022 crop year. Blank data cells indicate estimation period has not yet begun]

| Crop | Yield per hectare | | Production | |
|---|---|---|---|---|
| | 2021 | 2022 | 2021 | 2022 |
| | (metric tons) | (metric tons) | (metric tons) | (metric tons) |
| **Grains and hay** | | | | |
| Barley | 3.25 | | 2,562,030 | |
| Corn for grain | 11.11 | | 383,943,000 | |
| Corn for silage | 45.07 | | 118,221,590 | |
| Hay, all [2] | 5.31 | | 109,039,980 | |
| Alfalfa | 7.24 | | 44,674,310 | |
| All other | 4.48 | | 64,365,660 | |
| Oats | 2.20 | | 578,220 | |
| Proso millet | 1.30 | | 348,720 | |
| Rice | 8.64 | | 8,699,720 | |
| Rye | 2.09 | | 249,130 | |
| Sorghum for grain | 4.33 | | 11,374,900 | |
| Sorghum for silage | 34.42 | | 4,611,220 | |
| Wheat, all [2] | 2.98 | | 44,790,360 | |
| Winter | 3.37 | | 34,764,180 | |
| Durum | 1.63 | | 1,014,020 | |
| Other spring | 2.19 | | 9,012,150 | |
| **Oilseeds** | | | | |
| Canola | 1.46 | | 1,234,020 | |
| Cottonseed | (X) | | 4,877,930 | |
| Flaxseed | 0.63 | | 68,790 | |
| Mustard seed | 0.55 | | 19,880 | |
| Peanuts | 4.64 | | 2,898,140 | |
| Rapeseed | 2.03 | | 10,260 | |
| Safflower | 1.12 | | 61,310 | |
| Soybeans for beans | 3.45 | | 120,707,230 | |
| Sunflower | 1.71 | | 863,180 | |
| **Cotton, tobacco, and sugar crops** | | | | |
| Cotton, all [2] | 0.95 | | 3,837,170 | |
| Upland | 0.94 | | 3,757,270 | |
| American Pima | 1.59 | | 79,900 | |
| Sugarbeets | 74.38 | | 33,339,950 | |
| Sugarcane | 78.71 | | 29,790,130 | |
| Tobacco | 2.45 | | 216,800 | |
| **Dry beans, peas, and lentils** | | | | |
| Chickpeas | 0.91 | | 129,770 | |
| Dry edible beans | 1.91 | | 1,030,610 | |
| Dry edible peas | 1.15 | | 387,780 | |
| Lentils | 0.68 | | 150,910 | |
| **Potatoes and miscellaneous** | | | | |
| Hops | 2.13 | | 52,450 | |
| Maple syrup | (NA) | | 17,120 | |
| Mushrooms | (NA) | | 343,820 | |
| Peppermint oil | 0.12 | | 2,070 | |
| Potatoes | 49.07 | | 18,582,370 | |
| Spearmint oil | 0.13 | | 810 | |

(NA) Not available.
(X) Not applicable.
[1] Area planted for all purposes.
[2] Total may not add due to rounding.

## Fruits and Nuts Production in Domestic Units – United States: 2021 and 2022

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2022 crop year, except citrus which is for the 2021-2022 season. Blank data cells indicate estimation period has not yet begun]

| Crop | Production | |
|---|---|---|
| | 2021 | 2022 |
| **Citrus** [1] | | |
| Grapefruit ..... 1,000 tons | 438 | 397 |
| Lemons ..... 1,000 tons | 834 | 980 |
| Oranges ..... 1,000 tons | 4,388 | 3,786 |
| Tangerines and mandarins ..... 1,000 tons | 1,194 | 878 |
| **Noncitrus** | | |
| Apples, commercial ..... million pounds | 10,525.0 | |
| Apricots ..... tons | 55,500 | |
| Avocados ..... tons | | |
| Blueberries, Cultivated ..... 1,000 pounds | | |
| Blueberries, Wild (Maine) ..... 1,000 pounds | | |
| Cherries, Sweet ..... tons | 369,000 | |
| Cherries, Tart ..... million pounds | 142.0 | |
| Coffee (Hawaii) ..... 1,000 pounds | 27,120 | |
| Cranberries ..... barrel | 7,900,000 | |
| Dates ..... tons | | |
| Grapes ..... tons | 6,470,000 | |
| Kiwifruit (California) ..... tons | | |
| Nectarines (California) ..... tons | | |
| Olives (California) ..... tons | | |
| Papayas (Hawaii) ..... 1,000 pounds | | |
| Peaches ..... tons | 696,500 | |
| Pears ..... tons | 670,000 | |
| Plums (California) ..... tons | | |
| Prunes (California) ..... tons | | |
| Raspberries, all ..... 1,000 pounds | | |
| Strawberries ..... 1,000 cwt | | |
| **Nuts and miscellaneous** | | |
| Almonds, shelled (California) ..... 1,000 pounds | 2,800,000 | |
| Hazelnuts, in-shell (Oregon) ..... tons | | |
| Macadamias (Hawaii) ..... 1,000 pounds | | |
| Pecans, in-shell ..... 1,000 pounds | 258,000 | |
| Pistachios (California) ..... 1,000 pounds | | |
| Walnuts, in-shell (California) ..... tons | 670,000 | |

[1] Production years are 2020-2021 and 2021-2022.

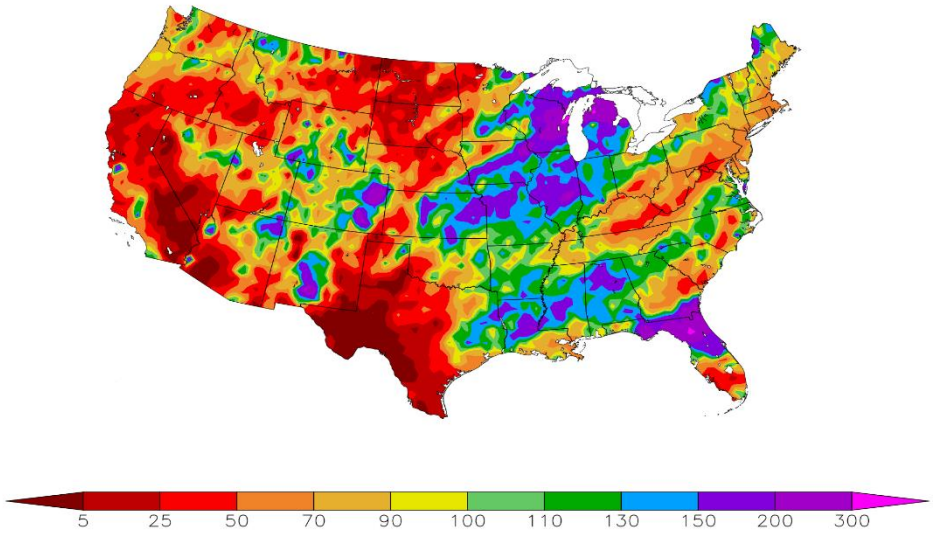
## Fruits and Nuts Production in Metric Units – United States: 2021 and 2022

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2022 crop year, except citrus which is for the 2021-2022 season. Blank data cells indicate estimation period has not yet begun]

| Crop | Production | |
|---|---|---|
| | 2021 | 2022 |
| | (metric tons) | (metric tons) |
| **Citrus** [1] | | |
| Grapefruit | 397,350 | 360,150 |
| Lemons | 756,590 | 889,040 |
| Oranges | 3,980,730 | 3,434,600 |
| Tangerines and mandarins | 1,083,180 | 796,510 |
| **Noncitrus** | | |
| Apples, commercial | 4,774,060 | |
| Apricots | 50,350 | |
| Avocados | | |
| Blueberries, Cultivated | | |
| Blueberries, Wild (Maine) | | |
| Cherries, Sweet | 334,750 | |
| Cherries, Tart | 64,410 | |
| Coffee (Hawaii) | 12,300 | |
| Cranberries | 358,340 | |
| Dates | | |
| Grapes | 5,869,490 | |
| Kiwifruit (California) | | |
| Nectarines (California) | | |
| Olives (California) | | |
| Papayas (Hawaii) | | |
| Peaches | 631,850 | |
| Pears | 607,810 | |
| Plums (California) | | |
| Prunes (California) | | |
| Raspberries, all | | |
| Strawberries | | |
| **Nuts and miscellaneous** | | |
| Almonds, shelled (California) | 1,270,060 | |
| Hazelnuts, in-shell (Oregon) | | |
| Macadamias (Hawaii) | | |
| Pecans, in-shell | 117,030 | |
| Pistachios (California) | | |
| Walnuts, in-shell (California) | 607,810 | |

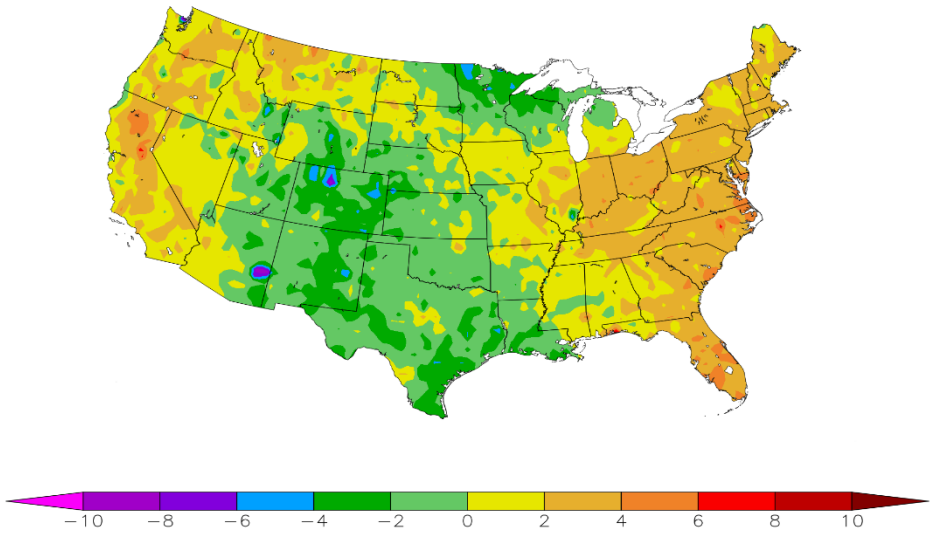
[1] Production years are 2020-2021 and 2021-2022.

Percent of Normal Precipitation (%)
3/1/2022 – 3/31/2022




NOAA Regional Climate Centers

Departure from Normal Temperature (F)
3/1/2022 – 3/31/2022




NOAA Regional Climate Centers

**March Weather Summary**

Drier-than-normal March weather in many areas of the West capped an extremely disappointing winter wet season, leaving key agricultural regions facing significant impacts—including low reservoir levels, reductions in water allocations, depleted soil moisture, and poor rangeland and pasture conditions—from a third consecutive year of drought. Notably, the water equivalency of the Sierra Nevada snowpack—hovering near 16 inches (just under two-thirds of the March 1 average) as the month began—shriveled to around 11 inches (about 40 percent of the end-of-season average) by March 31. An early-season Western heat wave, which peaked during the week of March 20-26, contributed to the loss of high-elevation snowpack due to melting and evaporation.

Meanwhile, significant drought impacts extended across portions of the Nation's mid-section, where similar conditions to those observed in the West led to stress on rangeland, pastures, and winter grains. By April 3, topsoil moisture on the Plains rated very short to short ranged from 46 percent in North Dakota to 96 percent in Montana. On the same date, Texas led the southern Plains with topsoil moisture rated 80 percent very short to short. Winter wheat conditions also reflected the Plains' drought, with 81 percent of Texas' crop rated in very poor to poor condition by April 3. At least one-quarter of the wheat was rated very poor to poor on that date in several other states, including Oklahoma (44 percent), Colorado (39 percent), Montana (37 percent), and Kansas (30 percent). Nationally, 36 percent of the winter wheat was rated very poor to poor on April 3—the highest amount in the first condition report of the season since April 7, 1996, when 40 percent was rated very poor to poor.

Numerous large wildfires flared during March across the central and southern Plains, driven by howling winds and fed by ample freeze- and drought-cured vegetation. Among the largest wildfires was the Eastland Complex (multiple fires, beginning on March 17, combined for management purposes), which collectively scorched 54,513 acres of vegetation and destroyed more than 150 structures, many of them homes in the community of Carbon, Texas. Later in the month, 30,000- to 50,000-acre blazes included the Washita River Fire near Durham, Oklahoma; the Borrega Fire west of Kingsville, Texas; the Canadian River Bottom Fire southwest of Canadian, Texas; and the Crittenburg Complex at Fort Hood, Texas.

During March, national drought coverage ranged from 58 to 61 percent. Drought coverage was last greater more than 9 years ago, in January 2013. The long-running drought has resulted in coverage exceeding 40 percent for a *Drought Monitor*-era record 80 consecutive weeks (September 29, 2020, to April 5, 2022). In addition, drought coverage has surpassed 50 percent for 20 weeks in a row, starting November 23, 2021, second only to a 42-week streak set from June 26, 2012, to April 9, 2013. Near the end of March, drought covered 89 percent of the 11-state Western region, while extreme to exceptional drought (D3 to D4) was affecting nearly 30 percent of that area.

In contrast, wetter-than-normal conditions were common during March from the Mississippi Valley eastward, with a few exceptions. By April 3, Midwestern topsoil moisture ranged from one-third to more than one-half surplus in Michigan (53 percent surplus), Indiana (42 percent), Illinois (42 percent), and Ohio (37 percent). Pockets of wetness extended into the South, resulting in mostly minor fieldwork and planting delays.

Elsewhere, several episodes of severe weather accompanied occasional showers and thunderstorms, primarily from the central and southern Plains into the Southeast. Impressive, early-season tornado outbreaks struck various regions on March 5-6, 21-23, and 29-31, resulting in a preliminary nationwide monthly count of approximately 250 tornadoes—a potential monthly record. One of the worst outbreaks started on March 5, when a rash of tornadoes in Iowa—unusual that far north so early in the year—resulted in seven fatalities in Madison and Lucas Counties.

March warmth was most prevalent in the East and West, with cooler conditions more common across the Nation's mid-section. However, persistently cold weather was limited to the upper Great Lakes region, where monthly temperatures generally averaged 2 to 4°F below normal. In contrast, similar positive temperature departures (2 to 4°F above normal) were observed in the East and Far West.

**March Agricultural Summary**

March was warmer than average for most of the eastern half of the Nation. Locations in the Mid-Atlantic and Southeast recorded temperatures 4°F or more above normal. In contrast, large parts of the Great Lakes and Lower Mississippi Valley were cooler than normal. Most of the Central and Southern Plains also recorded below normal temperatures for the month. In the Nation's West, most of California, the Pacific Northwest, and Northern Rockies were warmer than normal. Parts of Northern California recorded temperatures 4°F or more above normal. In contrast, much of the Central and Southern Rockies, as well as the Southwest, were cooler than normal. Locations in Arizona and Colorado recorded temperatures 6°F or more below normal. During March, large parts of the Great Lakes, Midwest, and Southeast received at least twice the normal amount of precipitation. Parts of the Florida Panhandle received at least 12 inches of rain for the month. While most of the West remained dryer than normal, locations in Colorado and New Mexico recorded at least twice the normal amount of precipitation.

By April 3, four percent of the Nation's winter wheat crop was headed, equal to last year but 1 percentage point ahead of the 5-year average. On April 3, thirty percent of the 2022 winter wheat crop was reported in good to excellent condition, 23 percentage points below last year. In Kansas, the largest winter wheat-producing State, 32 percent of the winter wheat crop was rated in good to excellent condition.

## Crop Comments

**Grapefruit:** The United States 2021-2022 grapefruit crop is forecast at 397,000 tons, up 7 percent from the previous forecast but down 9 percent from last season's revised final utilization. The Florida forecast, at 3.60 million boxes (153,000 tons), is down 8 percent from previous forecast and down 12 percent from the last season.

**Tangerines and mandarins:** The United States tangerine and mandarin crop is forecast at 878,000 tons, unchanged from the previous forecast but down 26 percent from the last season's revised final utilization. The California tangerine and mandarin forecast at 21.0 million boxes (840,000 tons) is unchanged from the previous forecast but down 27 percent from last season revised total.

**Lemons:** The 2021-2022 United States lemon crop is forecast at 980,000 tons, up slightly from previous forecast and up 18 percent last season's revised final utilization. The California forecast, at 23.0 million boxes (920,000 tons), is unchanged from the previous forecast but up 14 percent from the revised 2020-2021 season.

## Statistical Methodology

**Survey procedures:** The orange objective yield survey for the April 1 forecast was conducted in Florida. In August and September of last year, the number of bearing trees and number of fruit per tree is determined. In August and subsequent months, fruit size measurement and fruit droppage surveys are conducted, which are combined with the previous components to develop the current forecast of production. California and Texas conduct grower surveys on a quarterly basis in October, January, April, and July. California also conducts objective measurement surveys in September for Navel oranges and in March for Valencia oranges.

**Estimating procedures:** State level objective yield estimates for Florida oranges were reviewed for errors, reasonableness, and consistency with historical estimates. The Florida Field Office submits its analysis of the current situation to the Agricultural Statistics Board (ASB). The ASB uses the Florida survey data and their analyses to prepare the published April 1 forecast. Reports from growers in California and Texas were also used for setting estimates. These three States submit their analyses of the current situation to the Agricultural Statistics Board (ASB). The ASB uses the survey data and the State analyses to prepare the published April 1 forecast.

**Revision policy:** The April 1 production forecasts will not be revised. A new forecast will be made each month throughout the growing season. End-of-season estimates will be published in the *Citrus Fruits Summary* released in September. The production estimates are based on all data available at the end of the marketing season, including information from marketing orders, shipments, and processor records. Allowances are made for recorded local utilization and home use.

**Reliability:** To assist users in evaluating the reliability of the April 1 production forecasts, the "Root Mean Square Error," a statistical measure based on past performance, is computed. The deviation between the April 1 production forecast and the final estimate is expressed as a percentage of the final estimate. The average of squared percentage deviations for the latest 20-year period is computed. The square root of the average becomes statistically the "Root Mean Square Error." Probability statements can be made concerning expected differences in the current forecast relative to the final end-of-season estimate, assuming that factors affecting this year's forecast are not different from those influencing recent years. For example, the "Root Mean Square Error" for the April 1 orange production forecast is 3.0 percent. This means that chances are 2 out of 3 that the current orange production forecast will not be above or below the final estimates by more than 3.0 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 5.2 percent.

Also, shown in the following table is a 20-year record for selected crops of the differences between the April 1 forecast and the final estimate. Using oranges again as an example, changes between the April 1 orange forecast and the final estimates during the past 20-years have averaged 148,000 tons, ranging from 0 ton to 502,000 tons. The April 1 forecast for oranges has been below the final estimate 8 times, above 11 times and equal 1 time. The difference does not imply that the April 1 forecasts this year are likely to understate or overstate final production.

## Reliability of April 1 Crop Production Forecasts

[Based on data for the past twenty years]

| Crop | Root mean square error | 90 percent confidence interval | Difference between forecast and final estimate | | | | |
|---|---|---|---|---|---|---|---|
| | | | Production | | | Years | |
| | | | Average | Smallest | Largest | Below final | Above final |
| | (percent) | (percent) | (millions) | (millions) | (millions) | (number) | (number) |
| Oranges [1] ..... tons | 3.0 | 5.2 | 148 | 0 | 502 | 8 | 11 |

[1] Quantity is in thousands of units.

## USDA, National Agricultural Statistics Service Information Contacts

Listed below are the commodity statisticians in the Crops Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov

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- Irwin Anolik – Crop Weather ..... (202) 720-7621
- Joshua Bates – Hemp, Oats, Soybeans ..... (202) 690-3234
- David Colwell – Current Agricultural Industrial Reports ..... (202) 720-8800
- Michelle Harder – Barley, County Estimates, Hay ..... (202) 690-8533
- James Johanson – Rye, Wheat ..... (202) 720-8068
- Greg Lemmons – Corn, Flaxseed, Proso Millet ..... (202) 720-9526
- Becky Sommer – Cotton, Cotton Ginnings, Sorghum ..... (202) 720-5944
- Travis Thorson – Sunflower, Other Oilseeds ..... (202) 720-7369
- Lihan Wei – Peanuts, Rice ..... (202) 720-7688

Fleming Gibson, Head, Fruits, Vegetables and Special Crops Section ..... (202) 720-2127
- Fleming Gibson – Blueberries, Cranberries, Cucumbers, Pistachios, Potatoes, Pumpkins, Raspberries, Squash, Strawberries, Sugarbeets, Sugarcane, Sweet Potatoes ..... (202) 720-2127
- Deonne Holiday – Almonds, Apples, Asparagus, Carrots, Coffee, Onions, Plums, Prunes, Sweet Corn, Tobacco ..... (202) 720-4288
- Robert Little – Apricots, Dry Beans, Lettuce, Macadamia, Maple Syrup, Nectarines, Pears, Snap Beans, Spinach, Tomatoes ..... (202) 720-3250
- Krishna Rizal – Artichokes, Cauliflower, Celery, Garlic, Grapefruit, Hazelnuts, Kiwifruit, Lemons, Mandarins and tangerines, Mint, Mushrooms, Olives, Oranges ..... (202) 720-5412
- Antonio Torres – Cantaloupes, Dry Edible Peas, Green Peas, Honeydews, Lentils, Papayas, Peaches, Sweet Cherries, Tart Cherries, Walnuts, Watermelons ..... (202) 720-2157
- Chris Wallace – Avocados, Bell Peppers, Broccoli, Cabbage, Chickpeas, Chile Peppers, Dates, Floriculture, Grapes, Hops, Pecans ..... (202) 720-4215

## Access to NASS Reports

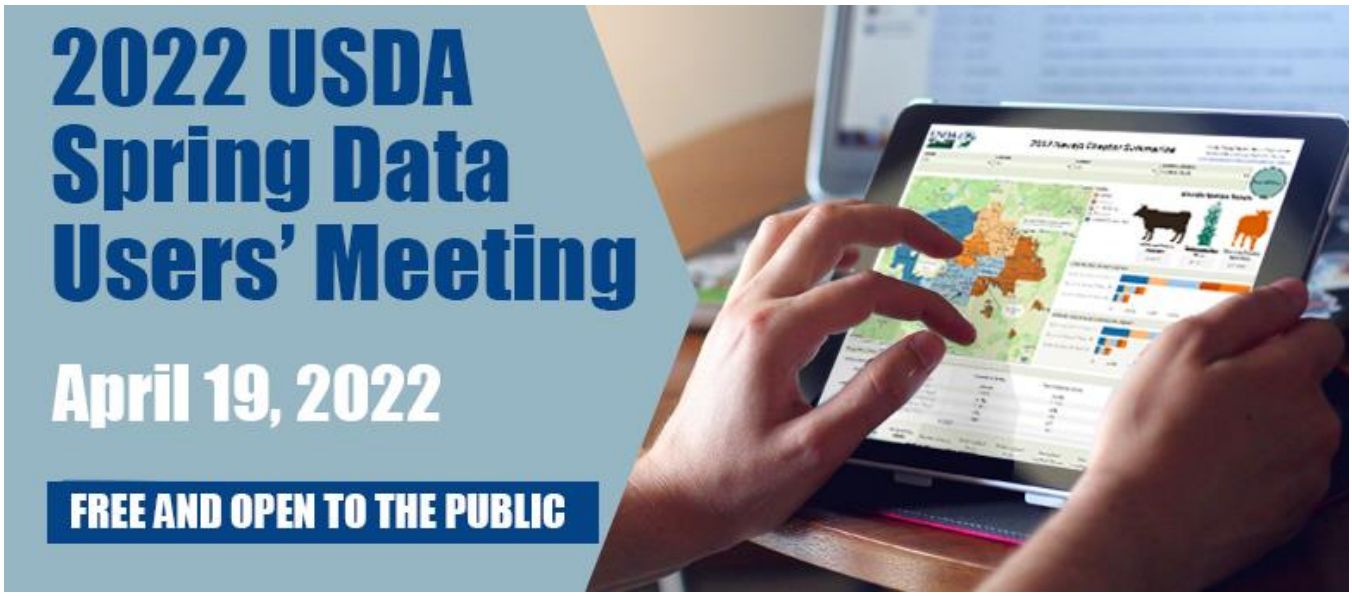
For your convenience, you may access NASS reports and products the following ways:

- All reports are available electronically, at no cost, on the NASS web site: www.nass.usda.gov

- Both national and state specific reports are available via a free e-mail subscription. To set-up this free subscription, visit www.nass.usda.gov and click on "National" or "State" in upper right corner above "search" box to create an account and select the reports you would like to receive.

- Cornell's Mann Library has launched a new website housing NASS's and other agency's archived reports. The new website, https://usda.library.cornell.edu. All email subscriptions containing reports will be sent from the new website, https://usda.library.cornell.edu. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: https://usda.library.cornell.edu/help. You should whitelist notifications@usda-esmis.library.cornell.edu in your email client to avoid the emails going into spam/junk folders.

For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.




# USDA Spring Data Users' Meeting

## Join Us Online or in Chicago

**April 19, 2022**

University of Chicago – Gleacher Center
450 North Cityfront Plaza Drive
Chicago, IL 60611

USDA's National Agricultural Statistics Service (NASS) will hold an open forum for users of U.S. domestic and international agriculture data. NASS is organizing the 2022 Spring Data Users' Meeting in cooperation with five other USDA agencies – Agricultural Marketing Service, Economic Research Service, Farm Service Agency, Foreign Agricultural Service, and World Agricultural Outlook Board – and the Census Bureau's Foreign Trade Division. Agency representatives will provide updates on recent and pending changes in statistical and information programs important to agriculture, answer questions, and welcome comments and input from data users.

For additional information about the Data Users' Meeting, see the meeting page on the NASS website (https://www.nass.usda.gov/Education_and_Outreach/Meeting/index.php).

The Data Users' Meeting precedes the Industry Outlook Conference at the same location on Wednesday, April 20, 2022. The outlook meeting brings together analysts from various commodity sectors to discuss developments and trends. For registration details or additional information about the Industry Outlook Conference, see the conference page on the LMIC website (http://lmic.info/page/meetings).