Crop Production

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Winter Wheat Production Up 1 Percent from May Forecast
Orange Production Up Less Than 1 Percent

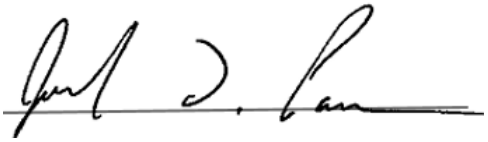
Winter wheat production is forecast at 1.14 billion bushels, up 1 percent from the May 1 forecast and up 3 percent from 2022. As of June 1, the United States yield is forecast at 44.9 bushels per acre, up 0.2 bushel from last month but down 2.1 bushels from last year's average yield of 47.0 bushels per acre.

Hard Red Winter production, at 525 million bushels, is up 2 percent last month. Soft Red Winter, at 402 million bushels, is down 1 percent from the May forecast. White Winter, at 209 million bushels, is down 1 percent from last month. Of the White Winter production, 10.3 million bushels are Hard White and 199 million bushels are Soft White.

The United States all orange forecast for the 2022-2023 season is 2.56 million tons, up less than 1 percent from the previous forecast but down 25 percent from the 2021- 2022 final utilization. The Florida all orange forecast, at 15.8 million boxes (709,000 tons), is up 1 percent from the previous forecast but down 62 percent from last season's final utilization. In Florida, early, midseason, and Navel varieties are forecast at 6.15 million boxes (277,000 tons), unchanged from the previous forecast but down 66 percent from last season's final utilization. The Florida Valencia orange forecast, at 9.60 million boxes (432,000 tons), is up 1 percent from the previous forecast but down 58 percent from last season's final utilization.

This report was approved on June 9, 2023.

Secretary of Agriculture
Designate
Robert Bonnie



Agricultural Statistics Board
Chairperson
Joseph L. Parsons

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Winter Wheat Area Harvested, Yield, and Production – States and United States: 2022 and Forecasted June 1, 2023

State	Area harvested		Yield per acre			Production	
	2022	2023	2022	2023		2022	2023
				May 1	June 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arkansas	150	160	53.0	51.0	51.0	7,950	8,160
California	70	95	73.0	80.0	80.0	5,110	7,600
Colorado	1,430	1,650	25.0	30.0	32.0	35,750	52,800
Idaho	710	700	90.0	87.0	87.0	63,900	60,900
Illinois	560	790	79.0	78.0	78.0	44,240	61,620
Indiana	240	380	81.0	77.0	77.0	19,440	29,260
Kansas	6,600	6,600	37.0	29.0	29.0	244,200	191,400
Kentucky	375	430	80.0	79.0	78.0	30,000	33,540
Maryland	170	175	78.0	79.0	75.0	13,260	13,125
Michigan	415	580	83.0	81.0	76.0	34,445	44,080
Mississippi	75	95	52.0	53.0	51.0	3,900	4,845
Missouri	410	600	60.0	60.0	60.0	24,600	36,000
Montana	1,800	1,750	33.0	44.0	44.0	59,400	77,000
Nebraska	820	970	32.0	34.0	34.0	26,240	32,980
North Carolina	375	420	64.0	63.0	64.0	24,000	26,880
North Dakota	95	110	60.0	54.0	54.0	5,700	5,940
Ohio	465	540	79.0	78.0	76.0	36,735	41,040
Oklahoma	2,450	2,150	28.0	23.0	25.0	68,600	53,750
Oregon	720	740	68.0	56.0	58.0	48,960	42,920
South Dakota	730	750	52.0	46.0	46.0	37,960	34,500
Tennessee	335	400	73.0	72.0	71.0	24,455	28,400
Texas	1,300	2,000	30.0	28.0	30.0	39,000	60,000
Virginia	150	145	68.0	61.0	61.0	10,200	8,845
Washington	1,800	1,750	68.0	57.0	56.0	122,400	98,000
Wisconsin	240	240	78.0	71.0	71.0	18,720	17,040
Other States [1]	974	1,066	56.0	61.8	61.8	54,542	65,840
United States	23,459	25,286	47.0	44.7	44.9	1,103,707	1,136,465

[1] Other States include Alabama, Delaware, Georgia, New Jersey, New Mexico, New York, Pennsylvania, South Carolina, Utah, and Wyoming. Individual State level estimates will be published in the *Small Grains 2023 Summary.*

Durum Wheat Area Harvested, Yield, and Production – States and United States: 2022 and Forecasted June 1, 2023

[Area harvested for the United States and remaining States will be published in the *Acreage* report released June 2023. Yield and production will be published in the *Crop Production* report released July 2023. Blank data cells indicate estimation period has not yet begun]

State	Area harvested		Yield per acre			Production	
	2022	2023	2022	2023		2022	2023
				May 1	June 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arizona	84	39	114.0	106.0	105.0	9,576	4,095
California	35	20	110.0	110.0	110.0	3,850	2,200
Idaho	7		65.0			455	
Montana	675		28.0			18,900	
North Dakota	780		40.0			31,200	
United States	1,581		40.5			63,981	

Wheat Production by Class – United States: 2022 and Forecasted June 1, 2023

[Wheat class estimates are based on the latest available data including both surveys and administrative data. The previous end-of-year season class percentages are used throughout the forecast season for States that do not have survey or administrative data available. Blank data cells indicate estimation period has not yet begun]

Crop	2022	2023
	(1,000 bushels)	(1,000 bushels)
Winter		
Hard red	530,910	525,387
Soft red	336,525	401,830
Hard white	10,647	10,317
Soft white	225,625	198,931
Spring		
Hard red	446,015	
Hard white	6,707	
Soft white	29,468	
Durum	63,981	
Total	1,649,878	

Hops Area Harvested by Variety – States and United States: 2022 and 2023

State and variety	Area harvested	Strung for harvest
	2022	2023
	(acres)	(acres)
Idaho		
Amarillo [R], VGXP01	379	542
Apollo [TM]	(D)	209
Cascade	845	720
Cashmere	140	137
Chinook	542	468
Citra [R], HBC 394	1,767	965
Columbus/Tomahawk [R]/Zeus (CTZ)	520	1,153
Comet	144	106
El Dorado [R]	304	241
Eureka! [TM]	419	527
Hallertauer Mittelfruher	159	159
Idaho 7 [R]	382	290
Mosaic [R], HBC 369	1,440	1,072
Mt. Rainier	85	58
Saaz	380	380
Simcoe [R], YCR 14	441	311
Triumph	55	(D)
Willamette	459	459
YQH 1320	(NA)	8
Other varieties [1]	806	1,027
Total	9,267	8,832
Oregon		
Amarillo [R], VGXP01	210	215
Cascade	658	622
Centennial	380	393
Chinook	90	76
Citra [R], HBC 394	1,691	1,457
Crystal	191	201
Liberty	(D)	25
Mosaic [R], HBC 369	901	839
Mt. Hood	171	198
Mt. Rainier	130	112
Nugget	441	376
Sabro [TM], HBC 438	119	(D)
Simcoe [R], YCR 14	527	506
Sterling	35	45
Strata [TM], OR91331	1,143	853
Tahoma	(D)	104
Talus [TM], HBC 692	46	(D)
Willamette	471	481
Other varieties [1]	552	390
Total	7,756	6,893

See footnote(s) at end of table.

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Hops Area Harvested by Variety – States and United States: 2022 and 2023 (continued)

State and variety	Area harvested	Strung for harvest
	2022	2023
	(acres)	(acres)
Washington		
Ahtanum [R], YCR 1	168	(D)
Amarillo [R], VGXP01	1,324	1,438
Apollo [TM]	807	804
Azacca [R], ADHA-483	871	447
Bravo [TM]	203	206
Cascade	3,604	2,978
Cashmere	717	314
Centennial	2,044	2,144
Chinook	1,443	1,241
Citra [R], HBC 394	8,586	6,340
Cluster	286	195
Columbus/Tomahawk [R]/Zeus (CTZ)	3,998	5,325
Comet	327	205
Crystal	(D)	63
Ekuanot [R], HBC 366	367	373
El Dorado [R]	861	552
Eureka! [TM]	570	621
Idaho 7 [R]	158	154
Loral [R], HBC 291	199	179
Mosaic [R], HBC 369	4,160	3,246
Mt. Hood	42	154
Mt. Rainier	212	212
Pahto [TM], HBC 682	1,709	2,264
Palisade [R], YCR 4	377	314
Pekko [R], ADHA-871	1,084	1,032
Sabro [TM], HBC 438	548	225
Simcoe [R], YCR 14	3,494	3,412
Super Galena [TM]	354	354
Tahoma	383	384
Talus [TM], HBC 692	377	179
Warrior [R], YCR 5	147	145
Willamette	124	216
YQH 1320	(NA)	62
Zappa [TM]	69	(D)
Experimental	702	740
Other varieties [1]	2,447	2,475
Total	42,762	38,993
United States [2]	59,785	54,718

(D) Withheld to avoid disclosing data for individual operations.
(NA) Not available.
[R] Registered
[TM] Trademark
[1] Includes data withheld to avoid disclosure of individual operations and varieties not listed.
[2] Includes 982 organic acres in 2022 and 772 organic acres in 2023.

Utilized Production of Citrus Fruits by Crop – States and United States: 2021-2022 and Forecasted June 1, 2023

[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	
	2021-2022	2022-2023	2021-2022	2022-2023
	(1,000 boxes)	(1,000 boxes)	(1,000 tons)	(1,000 tons)
Oranges				
California, all [2]	39,100	45,100	1,564	1,804
Early, mid, and Navel [3]	31,500	37,000	1,260	1,480
Valencia	7,600	8,100	304	324
Florida, all	41,200	15,750	1,854	709
Early, mid, and Navel [3]	18,250	6,150	821	277
Valencia	22,950	9,600	1,033	432
Texas, all [2]	200	1,050	8	45
Early, mid, and Navel [3]	170	700	7	30
Valencia	30	350	1	15
United States, all	80,500	61,900	3,426	2,558
Early, mid, and Navel [3]	49,920	43,850	2,088	1,787
Valencia	30,580	18,050	1,338	771
Grapefruit				
California [2]	4,100	4,200	164	168
Florida, all	3,330	1,820	142	77
Texas [2]	1,700	2,400	68	96
United States	9,130	8,420	374	341
Tangerines and mandarins [4]				
California [2]	17,500	21,000	700	840
Florida	750	490	36	23
United States	18,250	21,490	736	863
Lemons [2]				
Arizona	1,250	1,700	50	68
California	25,200	23,000	1,008	920
United States	26,450	24,700	1,058	988

[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] Estimates for current year carried forward from an earlier forecast.
[3] Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas.
[4] Includes tangelos and tangors.

Tart Cherry Production – States and United States: 2022 and Forecasted June 1, 2023

State	Total production	
	2022	2023
	(million pounds)	(million pounds)
Michigan	180.5	120.5
New York	(D)	8.4
Utah	22.6	40.3
Washington	(D)	26.0
Wisconsin	12.9	7.8
Other States	28.2	-
United States	244.2	203.0

- Represents zero.
(D) Withheld to avoid disclosing data for individual operations.

Sweet Cherry Production – States and United States: 2022 and Forecasted June 1, 2023

State	Total production	
	2022	2023
	(tons)	(tons)
California	55,100	80,000
Oregon	32,100	51,000
Washington	144,500	240,000
United States	231,700	371,000

Maple Syrup Taps, Yield, and Production – States and United States: 2021-2023

State	Number of taps			Yield per tap			Production		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
	(1,000 taps)	(1,000 taps)	(1,000 taps)	(gallons)	(gallons)	(gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)
Maine	1,960	1,860	1,880	0.262	0.341	0.250	514	634	470
Michigan	550	560	590	0.273	0.336	0.330	150	188	195
New Hampshire	530	500	460	0.240	0.308	0.302	127	154	139
New York	2,900	2,800	2,500	0.223	0.291	0.300	647	815	750
Pennsylvania	745	710	675	0.226	0.219	0.263	168	155	178
Vermont	6,500	6,650	6,350	0.269	0.384	0.322	1,750	2,554	2,045
Wisconsin	900	920	985	0.406	0.481	0.408	365	443	402
United States	14,085	14,000	13,440	0.264	0.353	0.311	3,721	4,943	4,179

Maple Syrup Price and Value – States and United States: 2021-2023

[Blank data cells indicate estimation period has not yet begun]

State	Average price per gallon			Value of production		
	2021	2022	2023 [1]	2021	2022	2023 [1]
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Maine	38.60	34.90		19,840	22,127	
Michigan	46.30	37.10		6,945	6,975	
New Hampshire	64.90	52.20		8,242	8,039	
New York	37.80	37.50		24,457	30,563	
Pennsylvania	36.20	34.90		6,082	5,410	
Vermont	32.00	33.10		56,000	84,537	
Wisconsin	33.10	31.40		12,082	13,910	
United States	35.90	34.70		133,648	171,561	

[1] Price and value for 2023 will be published in *Crop Production* released June 2024.

Maple Syrup Sales by Type – States: 2021 and 2022

State	Retail		Wholesale		Bulk		Value Added	
	2021	2022 [1]	2021	2022 [1]	2021	2022 [1]	2021	2022 [1]
	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)
Maine	(NA)	30	(NA)	74	(NA)	527	(NA)	3
Michigan	(NA)	59	(NA)	68	(NA)	52	(NA)	9
New Hampshire	(NA)	51	(NA)	76	(NA)	22	(NA)	6
New York	(NA)	171	(NA)	158	(NA)	447	(NA)	38
Pennsylvania	(NA)	38	(NA)	34	(NA)	73	(NA)	9
Vermont	(NA)	235	(NA)	197	(NA)	2,092	(NA)	31
Wisconsin	(NA)	35	(NA)	76	(NA)	330	(NA)	2
United States	(NA)	619	(NA)	683	(NA)	3,543	(NA)	98

(NA) Not available.
[1] Estimates began in 2022.

Maple Syrup Retail and Wholesale Price – States: 2021 and 2022

State	Retail		Wholesale	
	2021	2022 [1]	2021	2022 [1]
	(dollars per gallon)	(dollars per gallon)	(dollars per gallon)	(dollars per gallon)
Maine	(NA)	63.00	(NA)	39.60
Michigan	(NA)	50.80	(NA)	31.90
New Hampshire	(NA)	59.60	(NA)	54.90
New York	(NA)	53.00	(NA)	43.60
Pennsylvania	(NA)	45.40	(NA)	38.60
Vermont	(NA)	54.00	(NA)	37.30
Wisconsin	(NA)	52.70	(NA)	35.70
United States	(NA)	53.70	(NA)	40.30

(NA) Not available.
[1] Estimates began in 2022.

Maple Syrup Bulk Price – States: 2021 and 2022

State	Bulk all grades		Bulk all grades	
	2021	2022	2021	2022
	(dollars per pound)	(dollars per pound)	(dollars per gallon)	(dollars per gallon)
Maine	3.20	2.96	35.10	32.60
Michigan	2.40	2.58	26.80	28.40
New Hampshire	2.40	2.33	26.40	25.70
New York	2.40	2.67	26.70	29.40
Pennsylvania	2.50	2.51	27.60	27.70
Vermont	2.60	2.75	28.30	30.30
Wisconsin	2.50	2.56	27.40	28.20
United States	(NA)	2.70	(NA)	30.20

(NA) Not available.

Maple Syrup Grade – States: 2021 and 2022

State	Grade A		Processing Grade	
	2021	2022 [1]	2021	2022 [1]
	(gallons)	(gallons)	(gallon)	(gallon)
Maine	(NA)	586,199	(NA)	44,801
Michigan	(NA)	165,217	(NA)	13,783
New Hampshire	(NA)	137,080	(NA)	11,920
New York	(NA)	739,528	(NA)	36,472
Pennsylvania	(NA)	134,270	(NA)	10,730
Vermont	(NA)	2,188,308	(NA)	335,692
Wisconsin	(NA)	414,540	(NA)	26,460
United States	(NA)	4,365,142	(NA)	479,858

(NA) Not available.
[1] Estimates began in 2022.

Maple Sap Sales and Price – States: 2021 and 2022

State	Sap Sales		Sap Price	
	2021	2022 [1]	2021	2022 [1]
	(1,000 gallons)	(1,000 gallons)	(dollars per gallon)	(dollars per gallon)
Maine	(NA)	(D)	(NA)	(D)
Michigan	(NA)	(D)	(NA)	(D)
New Hampshire	(NA)	60	(NA)	0.27
New York	(NA)	794	(NA)	0.52
Pennsylvania	(NA)	108	(NA)	0.35
Vermont	(NA)	4,634	(NA)	0.90
Wisconsin	(NA)	1,487	(NA)	0.29
Other States [2]	(NA)	104	(NA)	1.55
United States	(NA)	7,187	(NA)	0.70

(D) Withheld to avoid disclosing data for individual operations.
(NA) Not available.
[1] Estimates began in 2022.
[2] Includes data withheld above.

Maple Syrup Season – States and United States: 2021-2023

State	Date season opened [1]			Date season closed [2]			Average season length [3]		
	2021	2022	2023 [4]	2021	2022	2023 [4]	2021	2022	2023 [4]
	(date)	(date)	(date)	(date)	(date)	(date)	(days)	(days)	(days)
Maine	Feb 15	Feb 5	(NA)	Apr 30	May 30	(NA)	31	36	(NA)
Michigan	Feb 1	Feb 16	(NA)	Apr 14	Apr 30	(NA)	25	30	(NA)
New Hampshire	Jan 11	Feb 4	(NA)	Apr 16	Apr 28	(NA)	26	36	(NA)
New York	Jan 1	Jan 1	(NA)	May 4	May 2	(NA)	29	33	(NA)
Pennsylvania	Jan 4	Feb 4	(NA)	Apr 15	Apr 22	(NA)	25	27	(NA)
Vermont	Jan 25	Jan 1	(NA)	Apr 23	May 16	(NA)	28	40	(NA)
Wisconsin	Feb 20	Feb 20	(NA)	Apr 10	May 3	(NA)	25	34	(NA)
United States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	27	34	(NA)

(NA) Not available.
[1] Approximately the first day that sap was collected.
[2] Approximately the last day that sap was collected.
[3] The average number of days that sap was collected.
[4] Estimates discontinued beginning in 2023.

Maple Syrup Average Open and Close Season Dates – States and United States: 2021-2023

State	Season Opened [1]			Season Closed [2]		
	2021	2022	2023 [3]	2021	2022	2023 [3]
	(date)	(date)	(date)	(date)	(date)	(date)
Maine	Mar 6	Mar 4	(NA)	Apr 6	Apr 9	(NA)
Michigan	Mar 2	Mar 9	(NA)	Mar 28	Apr 8	(NA)
New Hampshire	Mar 6	Feb 27	(NA)	Apr 1	Apr 4	(NA)
New York	Mar 4	Feb 28	(NA)	Apr 2	Apr 2	(NA)
Pennsylvania	Feb 27	Feb 24	(NA)	Mar 24	Mar 23	(NA)
Vermont	Mar 8	Feb 28	(NA)	Apr 5	Apr 9	(NA)
Wisconsin	Mar 6	Mar 18	(NA)	Mar 31	Apr 20	(NA)
United States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available.
[1] Approximate average opened date based on reported data.
[2] Approximate average closed date based on reported data.
[3] Estimates discontinued beginning in 2023.

Maple Syrup Price by Type of Sale and Size of Container – States: 2021 and 2022

Type and State	Gallon		1/2 Gallon		Quart		Pint		1/2 Pint	
	2021	2022 [1]	2021	2022 [1]	2021	2022 [1]	2021	2022 [1]	2021	2022 [1]
	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)
Retail										
Maine	61.40	(NA)	32.70	(NA)	18.10	(NA)	10.60	(NA)	6.50	(NA)
Michigan	47.70	(NA)	28.40	(NA)	14.70	(NA)	9.60	(NA)	6.80	(NA)
New Hampshire	65.50	(NA)	35.10	(NA)	19.90	(NA)	11.40	(NA)	7.50	(NA)
New York	45.60	(NA)	25.20	(NA)	17.00	(NA)	9.60	(NA)	5.70	(NA)
Pennsylvania	41.30	(NA)	24.30	(NA)	14.20	(NA)	8.85	(NA)	5.00	(NA)
Vermont	46.30	(NA)	27.80	(NA)	16.20	(NA)	11.40	(NA)	7.10	(NA)
Wisconsin	45.20	(NA)	26.30	(NA)	14.60	(NA)	8.80	(NA)	6.00	(NA)
Wholesale										
Maine	48.30	(NA)	24.80	(NA)	14.50	(NA)	7.90	(NA)	(D)	(NA)
Michigan	37.60	(NA)	24.90	(NA)	14.60	(NA)	8.50	(NA)	5.70	(NA)
New Hampshire	48.20	(NA)	28.80	(NA)	14.20	(NA)	8.25	(NA)	(D)	(NA)
New York	41.50	(NA)	23.80	(NA)	14.10	(NA)	9.10	(NA)	4.60	(NA)
Pennsylvania	39.80	(NA)	20.30	(NA)	13.40	(NA)	7.90	(NA)	4.40	(NA)
Vermont	37.90	(NA)	22.30	(NA)	13.80	(NA)	8.50	(NA)	5.10	(NA)
Wisconsin	40.70	(NA)	25.70	(NA)	13.20	(NA)	7.50	(NA)	4.60	(NA)

(D) Withheld to avoid disclosing data for individual operations.
(NA) Not available.
[1] Estimates discontinued beginning in 2022.

Maple Syrup Percent of Sales by Type – States: 2021 and 2022

State	Retail		Wholesale		Bulk	
	2021	2022 [1]	2021	2022 [1]	2021	2022 [1]
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Maine	6	(NA)	12	(NA)	82	(NA)
Michigan	27	(NA)	15	(NA)	58	(NA)
New Hampshire	71	(NA)	14	(NA)	15	(NA)
New York	24	(NA)	13	(NA)	63	(NA)
Pennsylvania	30	(NA)	14	(NA)	56	(NA)
Vermont	10	(NA)	4	(NA)	86	(NA)
Wisconsin	13	(NA)	5	(NA)	82	(NA)

(NA) Not available.
[1] Estimates discontinued beginning in 2022.

Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2022 and 2023

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2023 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Area planted		Area harvested	
	2022	2023	2022	2023
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Grains and hay				
Barley	2,945	2,922	2,433	
Corn for grain [1]	88,579	91,996	79,207	
Corn for silage	(NA)		6,860	
Hay, all	(NA)	(NA)	49,546	50,645
Alfalfa	(NA)		14,913	
All other	(NA)		34,633	
Oats	2,581	2,667	890	
Proso millet	637		507	
Rice	2,222	2,583	2,172	
Rye	2,175		341	
Sorghum for grain [1]	6,325	5,975	4,570	
Sorghum for silage	(NA)		525	
Wheat, all	45,738	49,855	35,480	
Winter	33,271	37,505	23,459	25,286
Durum	1,632	1,780	1,581	
Other spring	10,835	10,570	10,440	
Oilseeds				
Canola	2,213.0	2,270.0	2,169.0	
Cottonseed	(X)		(X)	
Flaxseed	263	175	244	
Mustard seed	221.0		182.0	
Peanuts	1,450.3	1,547.0	1,385.4	
Rapeseed	10.9		10.4	
Safflower	150.2		135.3	
Soybeans for beans	87,450	87,505	86,336	
Sunflower	1,693.0	1,361.0	1,607.0	
Cotton, tobacco, and sugar crops				
Cotton, all	13,761.0	11,256.0	7,307.7	
Upland	13,579.0	11,102.0	7,131.5	
American Pima	182.0	154.0	176.2	
Sugarbeets	1,159.5	1,110.8	1,137.1	
Sugarcane	(NA)		930.2	
Tobacco	(NA)	(NA)	201.8	197.1
Dry beans, peas, and lentils				
Chickpeas	353.1	340.5	341.9	
Dry edible beans	1,250.0	1,226.0	1,223.0	
Dry edible peas	919.0	1,000.0	862.0	
Lentils	660.0	519.0	602.0	
Potatoes and miscellaneous				
Hops	(NA)	(NA)	59.8	54.7
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		34.0	
Potatoes	901.0		895.6	
Spearmint oil	(NA)		13.7	

See footnote(s) at end of table.

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Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2022 and 2023 (continued)

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2023 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Yield per acre		Production	
	2022	2023	2022	2023
			(1,000)	(1,000)
Grains and hay				
Barley ..... bushels	71.7		174,333	
Corn for grain ..... bushels	173.3		13,729,719	
Corn for silage ..... tons	18.7		128,567	
Hay, all ..... tons	2.28		112,801	
Alfalfa ..... tons	3.22		47,958	
All other ..... tons	1.87		64,843	
Oats ..... bushels	64.8		57,655	
Proso millet ..... bushels	18.5		9,403	
Rice [2] ..... cwt	7,383		160,368	
Rye ..... bushels	36.1		12,301	
Sorghum for grain ..... bushels	41.1		187,785	
Sorghum for silage ..... tons	10.8		5,662	
Wheat, all ..... bushels	46.5		1,649,878	
Winter ..... bushels	47.0	44.9	1,103,707	1,136,465
Durum ..... bushels	40.5		63,981	
Other spring ..... bushels	46.2		482,190	
Oilseeds				
Canola ..... pounds	1,762		3,821,810	
Cottonseed ..... tons	(X)		4,415.0	
Flaxseed ..... bushels	17.6		4,304	
Mustard seed ..... pounds	557		101,290	
Peanuts ..... pounds	4,019		5,568,150	
Rapeseed ..... pounds	1,863		19,380	
Safflower ..... pounds	1,213		164,054	
Soybeans for beans ..... bushels	49.5		4,276,123	
Sunflower ..... pounds	1,750		2,812,540	
Cotton, tobacco, and sugar crops				
Cotton, all [2] ..... bales	950		14,468.0	
Upland [2] ..... bales	942		13,998.0	
American Pima [2] ..... bales	1,280		470.0	
Sugarbeets ..... tons	28.6		32,574	
Sugarcane ..... tons	37.3		34,671	
Tobacco ..... pounds	2,217		447,367	
Dry beans, peas, and lentils				
Chickpeas [2] ..... cwt	1,070		3,658	
Dry edible beans [2] ..... cwt	2,113		25,847	
Dry edible peas [2] ..... cwt	1,751		15,092	
Lentils [2] ..... cwt	912		5,489	
Potatoes and miscellaneous				
Hops ..... pounds	1,694		101,286.3	
Maple syrup ..... gallons	(NA)	(NA)	4,943	4,179
Mushrooms ..... pounds	(NA)		702,391	
Peppermint oil ..... pounds	99		3,349	
Potatoes ..... cwt	438		392,243	
Spearmint oil ..... pounds	120		1,648	

(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: 2022 and 2023

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2023 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Area planted		Area harvested	
	2022	2023	2022	2023
	(hectares)	(hectares)	(hectares)	(hectares)
Grains and hay				
Barley	1,191,810	1,182,500	984,610	
Corn for grain [1]	35,847,040	37,229,860	32,054,280	
Corn for silage	(NA)		2,776,170	
Hay, all [2]	(NA)	(NA)	20,050,770	20,495,530
Alfalfa	(NA)		6,035,140	
All other	(NA)		14,015,630	
Oats	1,044,500	1,079,310	360,170	
Proso millet	257,790		205,180	
Rice	899,220	1,045,310	878,990	
Rye	880,200		138,000	
Sorghum for grain [1]	2,559,660	2,418,020	1,849,430	
Sorghum for silage	(NA)		212,460	
Wheat, all [2]	18,509,710	20,175,820	14,358,400	
Winter	13,464,440	15,177,900	9,493,620	10,232,990
Durum	660,450	720,350	639,810	
Other spring	4,384,820	4,277,570	4,224,960	
Oilseeds				
Canola	895,580	918,650	877,770	
Cottonseed	(X)		(X)	
Flaxseed	106,430	70,820	98,740	
Mustard seed	89,440		73,650	
Peanuts	586,920	626,060	560,660	
Rapeseed	4,410		4,210	
Safflower	60,780		54,750	
Soybeans for beans	35,390,140	35,412,400	34,939,320	
Sunflower	685,140	550,780	650,340	
Cotton, tobacco, and sugar crops				
Cotton, all [2]	5,568,940	4,555,190	2,957,350	
Upland	5,495,290	4,492,870	2,886,050	
American Pima	73,650	62,320	71,310	
Sugarbeets	469,240	449,530	460,170	
Sugarcane	(NA)		376,440	
Tobacco	(NA)	(NA)	81,650	79,750
Dry beans, peas, and lentils				
Chickpeas	142,900	137,800	138,360	
Dry edible beans	505,860	496,150	494,940	
Dry edible peas	371,910	404,690	348,840	
Lentils	267,100	210,030	243,620	
Potatoes and miscellaneous				
Hops	(NA)	(NA)	24,190	22,140
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		13,760	
Potatoes	364,630		362,440	
Spearmint oil	(NA)		5,540	

See footnote(s) at end of table.

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Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2022 and 2023 (continued)

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2023 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Yield per hectare		Production	
	2022	2023	2022	2023
	(metric tons)	(metric tons)	(metric tons)	(metric tons)
Grains and hay				
Barley	3.85		3,795,650	
Corn for grain	10.88		348,750,930	
Corn for silage	42.01		116,634,020	
Hay, all [2]	5.10		102,331,350	
Alfalfa	7.21		43,506,770	
All other	4.20		58,824,580	
Oats	2.32		836,860	
Proso millet	1.04		213,260	
Rice	8.28		7,274,170	
Rye	2.26		312,460	
Sorghum for grain	2.58		4,769,960	
Sorghum for silage	24.18		5,136,480	
Wheat, all [2]	3.13		44,902,320	
Winter	3.16	3.02	30,037,980	30,929,510
Durum	2.72		1,741,280	
Other spring	3.11		13,123,060	
Oilseeds				
Canola	1.97		1,733,540	
Cottonseed	(X)		4,005,220	
Flaxseed	1.11		109,330	
Mustard seed	0.62		45,940	
Peanuts	4.50		2,525,670	
Rapeseed	2.09		8,790	
Safflower	1.36		74,410	
Soybeans for beans	3.33		116,377,000	
Sunflower	1.96		1,275,750	
Cotton, tobacco, and sugar crops				
Cotton, all [2]	1.07		3,150,040	
Upland	1.06		3,047,710	
American Pima	1.44		102,330	
Sugarbeets	64.22		29,550,640	
Sugarcane	83.55		31,453,000	
Tobacco	2.49		202,920	
Dry beans, peas, and lentils				
Chickpeas	1.20		165,920	
Dry edible beans	2.37		1,172,400	
Dry edible peas	1.96		684,560	
Lentils	1.02		248,980	
Potatoes and miscellaneous				
Hops	1.90		45,940	
Maple syrup	(NA)	(NA)	24,720	20,900
Mushrooms	(NA)		318,600	
Peppermint oil	0.11		1,520	
Potatoes	49.09		17,791,840	
Spearmint oil	0.13		750	

(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: 2022 and 2023

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2023 crop year, except citrus which is for the 2022-2023 season. Blank data cells indicate estimation period has not yet begun]

Crop		Production	
		2022	2023
Citrus [1]			
Grapefruit	1,000 tons	374	341
Lemons	1,000 tons	1,058	988
Oranges	1,000 tons	3,426	2,558
Tangerines and mandarins	1,000 tons	736	863
Noncitrus			
Apples, commercial	million pounds	9,765.0	
Apricots	tons	29,640	
Avocados	tons	156,900	
Blueberries, Cultivated	1,000 pounds	621,600	
Blueberries, Wild (Maine)	1,000 pounds	77,600	
Cherries, Sweet	tons	231,700	371,000
Cherries, Tart	million pounds	244.2	203.0
Coffee (Hawaii)	1,000 pounds	25,690	
Cranberries	barrel	8,058,000	
Dates	tons	66,150	
Grapes	tons	5,922,500	
Kiwifruit (California)	tons	36,500	
Nectarines (California)	tons	109,000	
Olives (California)	tons	69,700	
Papayas (Hawaii)	1,000 pounds	8,350	
Peaches	tons	625,680	
Pears	tons	644,000	
Plums (California)	tons	81,300	
Prunes (California)	tons	226,800	
Raspberries	1,000 pounds	168,600	
Strawberries	1,000 cwt	27,820.0	
Nuts and miscellaneous			
Almonds, shelled (California)	1,000 pounds	2,565,000	2,500,000
Hazelnuts, in-shell (Oregon)	tons	77,500	
Macadamias (Hawaii)	1,000 pounds	37,700	
Pecans, in-shell	1,000 pounds	277,700	
Pistachios (California)	1,000 pounds	882,000	
Walnuts, in-shell (California)	tons	752,000	

[1] Production years are 2021-2022 and 2022-2023.

Fruits and Nuts Production in Metric Units – United States: 2022 and 2023

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2023 crop year, except citrus which is for the 2022-2023 season. Blank data cells indicate estimation period has not yet begun]

Crop	Production	
	2022	2023
	(metric tons)	(metric tons)
Citrus [1]		
Grapefruit	339,290	309,350
Lemons	959,800	896,300
Oranges	3,108,010	2,320,580
Tangerines and mandarins	667,690	782,900
Noncitrus		
Apples, commercial	4,429,330	
Apricots	26,890	
Avocados	142,340	
Blueberries, Cultivated	281,950	
Blueberries, Wild (Maine)	35,200	
Cherries, Sweet	210,190	336,570
Cherries, Tart	110,770	92,080
Coffee (Hawaii)	11,650	
Cranberries	365,500	
Dates	60,010	
Grapes	5,372,800	
Kiwifruit (California)	33,110	
Nectarines (California)	98,880	
Olives (California)	63,230	
Papayas (Hawaii)	3,790	
Peaches	567,610	
Pears	584,230	
Plums (California)	73,750	
Prunes (California)	205,750	
Raspberries	76,480	
Strawberries	1,261,890	
Nuts and miscellaneous		
Almonds, shelled (California)	1,163,460	1,133,980
Hazelnuts, in-shell (Oregon)	70,310	
Macadamias (Hawaii)	17,100	
Pecans, in-shell	125,960	
Pistachios (California)	400,070	
Walnuts, in-shell (California)	682,200	

[1] Production years are 2021-2022 and 2022-2023.

Winter Wheat for Grain Objective Yield Data

The National Agricultural Statistics Service is conducting objective yield surveys in 10 winter wheat-producing States during 2023. Randomly selected plots in winter wheat for grain fields are visited monthly from May through harvest to obtain specific counts and measurements. Data in this table are based on counts from this survey.

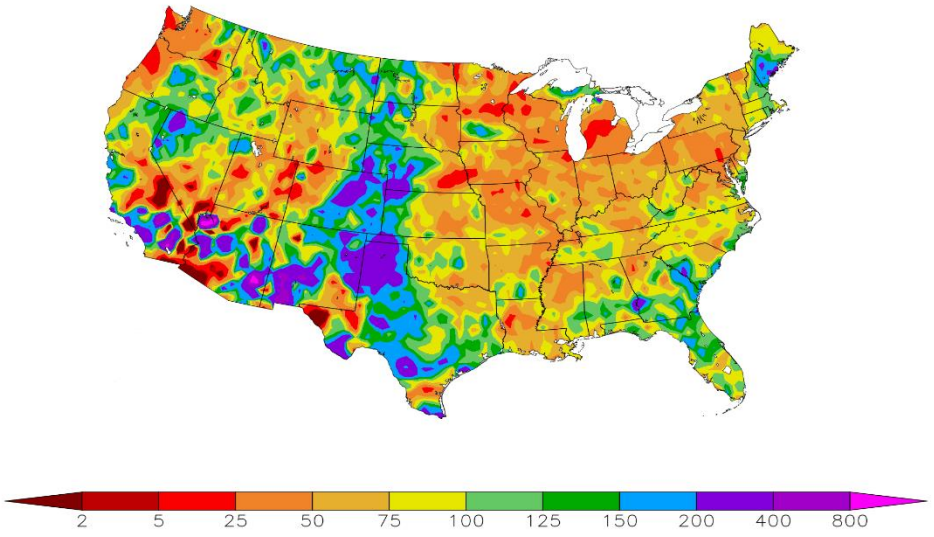
Winter Wheat Objective Yield Percent of Samples Processed in the Lab – United States: 2019-2023

[Blank data cells indicate estimation period has not yet begun]

Year	June	July	August
	Mature [1]	Mature [1]	Mature [1]
	(percent)	(percent)	(percent)
2019	8	50	89
2020	14	64	92
2021	7	64	97
2022	14	64	91
2023	9		

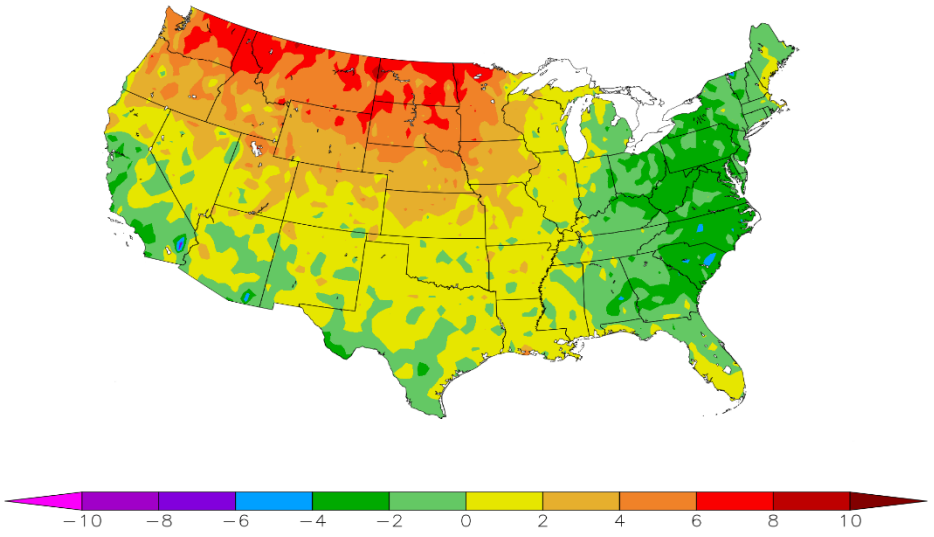
[1] Includes winter wheat in the hard dough stage or beyond and are considered mature or almost mature.

Percent of Normal Precipitation (%)
5/1/2023 – 5/31/2023



NOAA Regional Climate Centers

Departure from Normal Temperature (F)
5/1/2023 – 5/31/2023



NOAA Regional Climate Centers

May Weather Summary

During May, atmospheric blocking resulted in unusual warmth across the North, especially from the Pacific Northwest into the Upper Midwest. In fact, it was the warmest May on record in some Pacific Northwestern locations, fueled by an early-season heat wave peaking from May 11-20. Monthly temperatures averaged at least 5°F above normal as far east as Minnesota. In contrast, cooler-than-normal conditions dominated the East, particularly the middle Atlantic States.

The same blocking high-pressure system responsible for the Northern warmth contributed to record-shattering dryness in parts of the Midwest and Northeast. Monthly rainfall totaling less than one-quarter inch marked the lowest May values on record in locations such as Omaha, Nebraska (0.17 inch), and Reading Pennsylvania (0.09 inch). By May 28, topsoil moisture rated very short to short by USDA/NASS climbed to 80 percent in Pennsylvania and 78 percent in Maryland. On the same date, topsoil moisture was rated at least 40 percent very short to short in all Midwestern States except Minnesota and North Dakota, led by Michigan (68 percent) and Missouri (62 percent). The Northern warmth and dryness promoted a rapid fieldwork pace, following earlier planting delays related to melting snow and low air and soil temperatures. For example, nearly all the northern Plains' sugarbeets were seeded in the 2-week period ending May 21, with North Dakota's planting progress advancing from 1 to 90 percent complete.

Meanwhile, copious rain fell on the High Plains from Montana to Texas, especially during the mid- to late-month period. Borger, Texas, experienced its wettest month and May on record, with 9.70 inches—a value boosted by totals of at least an inch on May 3, 14, 17, and 18. On the strength of the Plains' rain, drought coverage in the contiguous United States fell to 18.95 percent by May 30, down from 24.42 percent early in the month and 62.95 percent on October 25, 2022. Despite the improvement, a core drought area persisted across much of Kansas, eastern Nebraska, and the northwestern half of Oklahoma. According to the *Drought Monitor*, Kansas led the Nation on May 30 with nearly 57 percent of the state experiencing extreme to exceptional drought (D3 to D4). Correspondingly, Kansas led the Nation on May 28 with 51 percent of its rangeland and pastures rated very poor to poor, followed by Nebraska at 43 percent. Additionally, late-spring rainfall on the central and southern Plains largely arrived too late to benefit winter wheat. On May 28, more than two-thirds (69 percent) of the winter wheat in Kansas was rated in very poor to poor condition, followed by Nebraska (51 percent) and Texas (40 percent).

Farther west, recovery from a drought that lasted up to 3 years neared completion, aside from storage in larger reservoirs. By May 30, only 17 percent of the 11-state Western region was experiencing drought, down from nearly 74 percent as recently as early-November 2022. In California, runoff from earlier precipitation and melting snow led to ongoing flooding in the normally dry Tulare Lake basin, idling agricultural land and flooding low-lying communities in portions of the San Joaquin Valley. By the end of May, approximately one-third of the Sierra Nevada snowpack—containing more than 20 inches of liquid equivalency—had not yet melted, portending additional challenges for Western water managers contending with this year's heavy runoff. Meanwhile along the Colorado River, the surface elevation of Lake Mead—above Hoover Dam—rose to 1,054.28 feet by the end of May, up 13.36 feet from the end-of-month record low set on July 31, 2022. Farther north, however, patchy short-term drought began to re-emerge during May across roughly the northern one-third of the West, amid warmer-than-normal conditions. Some of the dryness was reflected by Oregon's statistics, which indicated that topsoil moisture was rated 60 percent very short to short by May 28. Elsewhere, much of the Deep South received ample rain during May, maintaining generally favorable conditions for pastures and summer crops. In fact, some previously dry areas, including Florida's peninsula, received beneficial May rainfall.

May Agricultural Summary

Except for the Nation's East and Southwest, May was warmer than average. Parts of the Upper Midwest, Pacific Northwest, Northern Plains, and Northern Rockies recorded temperatures 6°F or more above normal. In contrast, locations in Alabama, Southern Arizona, Southern California, and the Carolinas recorded temperatures 4°F or more below normal. While most of the eastern half of the Nation remained drier than normal, at least twice the normal amount of rainfall was recorded in parts of the Great Basin, Great Plains, and Southwest, as well as locations in Maine and the Southeast. Locations in the Great Plains recorded 8 inches or more of rain for the month.

By May 7, producers had planted 49 percent of the Nation's corn crop, 28 percentage points ahead of last year and 7 percentage points ahead of the 5-year average. Twelve percent of the Nation's corn acreage had emerged by May 7,

seven percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. By May 21, producers had planted 81 percent of the Nation's corn crop, 12 percentage points ahead of last year and 6 percentage points ahead of the 5-year average. Fifty-two percent of the Nation's corn acreage had emerged by May 21, seventeen percentage points ahead of the previous year and 7 percentage points ahead of the 5-year average. By June 4, producers had planted 96 percent of the Nation's corn crop, 3 percentage points ahead of last year and 5 percentage points ahead of the 5-year average. At that time, corn planting progress was equal to or ahead of the 5-year average in 17 of the 18 estimating States. Eighty-five percent of the Nation's corn acreage had emerged by June 4, nine percentage points ahead of the previous year and 8 percentage points ahead of the 5-year average. On June 4, sixty-four percent of the Nation's corn acreage was rated in good to excellent condition, 9 percentage points below the same time last year.

Thirty-five percent of the Nation's soybean acreage was planted by May 7, twenty-four percentage points ahead of last year and 14 percentage points ahead of the 5-year average. Nine percent of the Nation's soybean acreage had emerged by May 7, six percentage points ahead of last year and 5 percentage points ahead of the 5-year average. Sixty-six percent of the Nation's soybean acreage was planted by May 21, nineteen percentage points ahead of last year and 14 percentage points ahead of the 5-year average. Thirty-six percent of the Nation's soybean acreage had emerged by May 21, seventeen percentage points ahead of last year and 12 percentage points ahead of the 5-year average. Ninety-one percent of the Nation's soybean acreage was planted by June 4, fifteen percentage points ahead of both last year and the 5-year average. At that time, soybean planting progress was ahead of the 5-year average in all 18 estimating States. Seventy-four percent of the Nation's soybean acreage had emerged by June 4, twenty percentage points ahead of last year and 18 percentage points ahead of the 5-year average. On June 4, sixty-two percent of the Nation's soybean acreage was rated in good to excellent condition.

By May 7, thirty-eight percent of the Nation's winter wheat crop was headed, 6 percentage points ahead of last year and 3 percentage points ahead of the 5-year average. By May 21, sixty-one percent of the Nation's winter wheat crop was headed, equal to both last year and the 5-year average. By June 4, eighty-two percent of the Nation's winter wheat crop was headed, 4 percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. Four percent of the 2023 winter wheat acreage had been harvested by June 4, one percentage point behind last year but equal to the 5-year average. On June 4, thirty-six percent of the 2023 winter wheat crop was reported in good to excellent condition, 6 percentage points above the same time last year.

Nationwide, 22 percent of the cotton crop was planted by May 7, one percentage point behind both the previous year and the 5-year average. Nationwide, 45 percent of the cotton crop was planted by May 21, seven percentage points behind the previous year and 5 percentage points behind the 5-year average. Nationwide, 71 percent of the cotton crop was planted by June 4, eleven percentage points behind the previous year and 4 percentage points behind the 5-year average. Six percent of the Nation's cotton acreage had reached the squaring stage by June 4, four percentage points behind both last year and the 5-year average. On June 4, fifty-one percent of the 2023 cotton acreage was rated in good to excellent condition, 3 percentage points above the same time last year.

Twenty-four percent of the Nation's sorghum acreage was planted by May 7, two percentage points ahead of the previous year but equal to the 5-year average. Thirty-three percent of the Nation's sorghum acreage was planted by May 21, one percentage point ahead of the previous year but equal to the 5-year average. Forty-nine percent of the Nation's sorghum acreage was planted by June 4, five percentage points behind the previous year and 4 percentage points behind the 5-year average. Texas had planted 85 percent of its sorghum acreage by June 4, equal to the previous year but 3 percentage points behind the 5-year average.

By May 7, producers had seeded 72 percent of the 2023 rice acreage, 9 percentage points ahead of both the previous year and the 5-year average. By May 7, fifty-five percent of the Nation's rice acreage had emerged, 20 percentage points ahead of last year and 14 percentage points ahead of the 5-year average. By May 21, producers had seeded 90 percent of the 2023 rice acreage, 1 percentage point ahead of the previous year and 2 percentage points ahead of the 5-year average. By May 21, seventy-six percent of the Nation's rice acreage had emerged, 12 percentage points ahead of last year and 10 percentage points ahead of the 5-year average. By June 4, eighty-eight percent of the Nation's rice acreage had emerged, equal to last year but 1 percentage point ahead of the 5-year average. On June 4, seventy percent of the Nation's rice acreage was rated in good to excellent condition, 2 percentage points below the same time last year.

Nationally, oat producers had seeded 60 percent of this year's acreage by May 7, six percentage points ahead of the previous year but 4 percentage points behind the 5-year average. Forty-two percent of the Nation's oat acreage was emerged by May 7, seven percentage points ahead of the previous year but 1 percentage point behind the 5-year average. Nationally, oat producers had seeded 82 percent of this year's acreage by May 21, six percentage points ahead of the previous year but 3 percentage points behind the 5-year average. Sixty-five percent of the Nation's oat acreage had emerged by May 21, nine percentage points ahead of the previous year but 2 percentage points behind the 5-year average. Nationally, oat producers had seeded 97 percent of this year's acreage by June 4, four percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. Eighty-six percent of the Nation's oat acreage had emerged by June 4, seven percentage points ahead of the previous year but equal to the 5-year average. Thirty-two percent of the Nation's oat acreage had headed by June 4, seven percentage points ahead of last year and 2 percentage points ahead of the 5-year average. On June 4, fifty-seven percent of the Nation's oat acreage was rated in good to excellent condition, 2 percentage points above the same time last year.

Thirty-eight percent of the Nation's barley crop was planted by May 7, eight percentage points behind last year and 12 percentage points behind the 5-year average. Eleven percent of the Nation's barley crop had emerged by May 7, nine percentage points behind the previous year and 8 percentage points behind the 5-year average. Seventy percent of the Nation's barley crop was planted by May 21, equal to last year but 10 percentage points behind the 5-year average. Thirty-three percent of the Nation's barley crop had emerged by May 21, twelve percentage points behind the previous year and 17 percentage points behind the 5-year average. Ninety-two percent of the Nation's barley crop was planted by June 4, two percentage points ahead of last year but 3 percentage points behind the 5-year average. Seventy-two percent of the Nation's barley crop had emerged by June 4, one percentage point ahead of the previous year but 8 percentage points behind the 5-year average. On June 4, sixty-five percent of the Nation's barley acreage was rated in good to excellent condition, 19 percentage points above the same time last year.

By May 7, twenty-four percent of the spring wheat crop was seeded, 2 percentage points behind last year and 14 percentage points behind the 5-year average. By May 7, five percent of the Nation's spring wheat crop had emerged, 3 percentage points behind the previous year and 6 percentage points behind the 5-year average. By May 21, sixty-four percent of the spring wheat crop was seeded, 16 percentage points ahead of last year but 9 percentage points behind the 5-year average. By May 21, thirty-two percent of the Nation's spring wheat crop had emerged, 5 percentage points ahead of the previous year but 8 percentage points behind the 5-year average. By June 4, ninety-three percent of the spring wheat crop was seeded, 12 percentage points ahead of last year but equal to the 5-year average. By June 4, seventy-six percent of the Nation's spring wheat crop had emerged, 23 percentage points ahead of the previous year and 2 percentage points ahead of the 5-year average. On June 4, sixty-four percent of the Nation's spring wheat was rated in good to excellent condition.

Nationally, peanut producers had planted 17 percent of the 2023 peanut acreage by May 7, six percentage points behind both the previous year and the 5-year average. Nationally, peanut producers had planted 55 percent of the 2023 peanut acreage by May 21, seven percentage points behind last year and 6 percentage points behind the 5-year average. Nationally, peanut producers had planted 85 percent of the 2023 peanut acreage by June 4, two percentage points behind last year but equal to the 5-year average. Advances of 10 percentage points or more were reported in all 8 estimating States. On June 4, seventy-two percent of the Nation's peanut acreage was rated in good to excellent condition, 1 percentage point below the same time last year.

By May 7, forty-one percent of the sugarbeet crop was planted, 16 percentage points ahead of last year but 15 percentage points behind the 5-year average. By May 21, ninety-five percent of the sugarbeet crop was planted, 47 percentage points ahead of last year and 11 percentage points ahead of the 5-year average. Planting progress in North Dakota and Minnesota advanced by 30 percent and 19 percent respectively.

Five percent of the Nation's intended 2023 sunflower acreage was planted by May 21, one percentage point ahead of last year but 5 percentage points behind the 5-year average. Forty percent of the Nation's intended 2023 sunflower acreage was planted by June 4, nine percentage points ahead of last year but 1 percentage point behind the 5-year average. Advances of 10 percentage points or more were reported in all 4 estimating States.

Crop Comments

Winter wheat: Production is forecast at 1.14 billion bushels, up 1 percent from the May 1 forecast and up 3 percent from 2022. As of June 1, the United States yield is forecast at 44.9 bushels per acre, up 0.2 bushel from last month but down 2.1 bushels from last year's average yield of 47.0 bushels per acre. Dry conditions through the Central Plains have hampered yield potential. As of June 4, thirty-six percent of the winter wheat acreage in the 18 major producing States was rated in good to excellent condition, six percentage points higher than at the same time last year. Nationally, 82 percent of the winter wheat crop was headed by June 4, one percentage point ahead of the 5-year average pace.

Forecasted head counts from the objective yield survey in the six Hard Red Winter States (Colorado, Kansas, Montana, Nebraska, Oklahoma, and Texas) are below last year's final head count in Kansas, Nebraska, and Oklahoma, but are above last year's in Colorado, Montana, and Texas. As of June 4, the winter wheat crop in Kansas, Oklahoma, and Texas was rated in good to excellent condition at 12 percent, 37 percent, and 29 percent, respectively. In Texas, winter wheat harvest was 29 percent complete, 3 percentage points behind the 5-year average pace.

Forecasted head counts from the objective yield survey in the three Soft Red Winter States (Illinois, Missouri, and Ohio) are below last year's final head count in Illinois and Missouri but are above last year's in Ohio. As of June 4, the winter wheat crop in Illinois, Missouri, and Ohio was rated in good to excellent condition at 65 percent, 57 percent, and 64 percent, respectively.

Forecasted head counts from the objective yield survey in Washington are below last year's final head count. As of June 4, the winter wheat crop in Idaho, Oregon, and Washington was rated in good to excellent condition at 55 percent, 42 percent, and 63 percent, respectively.

Durum wheat: Production of Durum wheat in Arizona and California is forecast at a collective 6.30 million bushels, down 1 percent from last month and down 53 percent from last year.

Grapefruit: The United States 2022-2023 grapefruit crop is forecast at 341,000 tons, virtually unchanged from the previous forecast but down 9 percent from last season's final utilization. The Florida forecast, at 1.82 million boxes (77,000 tons), is up 1 percent from previous forecast but down 45 percent from the last season. California and Texas grapefruit production forecasts were carried forward from the previous forecast.

Tangerines and mandarins: The United States tangerine and mandarin crop is forecast at 863,000 tons, down slightly from the previous forecast but up 17 percent from the last season's final utilization. The Florida tangerine and mandarin forecast, at 490,000 boxes (23,000 tons), is down 2 percent from the previous forecast and down 35 percent from last season. The California tangerine and mandarin forecast was carried forward from the previous forecast.

Hops: United States hop acreage strung for harvest in 2023 is forecast at 54,718 acres, down 8 percent from last year's total of 59,785 acres. In Washington, the largest acreage State, 38,993 acres were strung for harvest, down 9 percent from the previous season. In Idaho, area strung for harvest was 8,832 acres, down 5 percent from 2022. Oregon hop growers strung 6,893 acres for harvest this season, down 11 percent compared to 7,756 acres last season.

Cherries, Tart: United States tart cherry total production for 2023 is forecast at 203 million pounds, down 17 percent from the 2022 production. In Michigan, the largest producing State, a mild winter was followed by periods of cold weather from mid-April to early-May, with some reports of frost damage. Warmer weather in the last half of May pushed tart cherry development and pollination activity increased. In Utah, as of the week ending May 28, bloom was 95 percent complete compared with 79 percent for the previous year.

Cherries, Sweet: United States sweet cherry total production for 2023 is forecast at 371,000 tons, up 60 percent from 2022. In Washington, the largest producing State, growing conditions were ideal, with temperatures in the low 40's to mid-80's. In California, a long-wet winter was followed by a cool spring that slowed crop growth. This delayed the start of the harvesting season. Ample rain helped replenish soil moisture for orchards, which aided production. In Oregon, an early spring freeze had no impact on the crop. Warm weather created ideal growing conditions throughout the growing season.

Maple syrup: The 2023 United States maple syrup production totaled 4.18 million gallons, down 15 percent from the previous season. The number of taps totaled 13.4 million, down 4 percent from the 2022 total. Yield per tap was 0.311 gallon, down 0.042 gallon from the previous season.

The 2022 United States average price per gallon was $34.70, down $1.20 from 2021. Value of production, at $172 million for 2022, was up 28 percent from the 2021 season.

Statistical Methodology

Wheat survey procedures: Objective yield and farm operator surveys were conducted between May 25 and June 6 to gather information on expected yield as of June 1. The objective yield survey was conducted in 10 States that accounted for about 65 percent of the 2022 winter wheat production. Farm operators were interviewed to update previously reported acreage data and seek permission to randomly locate two sample plots in selected winter wheat fields. The counts made within each sample plot depended upon the crop's maturity. Counts such as number of stalks, heads in late boot, and number of emerged heads were made to predict the number of heads that will be harvested. The counts are used with similar data from previous years to develop a projected biological yield. The average harvesting loss is subtracted to obtain a net yield. The plots are revisited each month until crop maturity when the heads are clipped, threshed, and weighed. After the farm operator has harvested the sample field, another plot is sampled to obtain current year harvesting loss.

The farm operator survey was conducted primarily by telephone with some use of mail, internet, and personal interview. Approximately 3,100 producers were interviewed during the survey period and asked questions about the probable yield on their operation. These growers will continue to be surveyed throughout the growing season to provide indications of average yields.

Orange survey procedures: The orange objective yield survey for the June 1 forecast was conducted in Florida. In August and September last year, the number of bearing trees and the number of fruit per tree was determined. In August and subsequent months, fruit size measurement and fruit droppage surveys are conducted, which combined with the previous components are used 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.

Wheat estimating procedures: National and State level objective yield and grower reported data were reviewed for reasonableness and consistency with historical estimates. The survey data were also reviewed considering weather patterns and crop progress compared to previous months and previous years. Each Regional Field Office submits their analysis of the current situation to the Agricultural Statistics Board (ASB). The ASB uses the survey data and the State analyses to prepare the published June 1 forecasts.

Orange estimating procedures: State level objective yield indications 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 analysis to prepare the published June 1 forecast. The June 1 orange production forecasts for California and Texas are carried forward from April.

Revision policy: The June 1 production forecast will not be revised; instead, a new forecast will be made each month throughout the growing season. End-of-season wheat estimates are made after harvest. At the end of the wheat marketing season, a balance sheet is calculated using carryover stocks, production, exports, millings, feeding, and ending stocks. Revisions are then made if the balance sheet relationships or other administrative data warrant changes. End-of-season orange estimates will be published in the *Citrus Fruits Summary* released in August. The orange 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 June 1 production forecast, the “Root Mean Square Error,” a statistical measure based on past performance, is computed. The deviation between the June 1 production forecast and the final estimate is expressed as a percentage of the final estimate. The average of the 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.

The “Root Mean Square Error” for the June 1 winter wheat production forecast is 4.9 percent. This means that chances are 2 out of 3 that the current winter wheat production will not be above or below the final estimate by more than 4.9 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 8.4 percent.

Also shown in the following table is a 20-year record for selected crops of the differences between the June 1 forecast and the final estimate. Using winter wheat again as an example, changes between the June 1 forecast and final estimate during the last 20 years have averaged 58 million bushels, ranging from 4 million to 166 million bushels. The June 1 forecast has been below the final estimate 9 times and above 11 times. This does not imply that the June 1 winter wheat forecast this year is likely to understate or overstate final production.

Reliability of June 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	3.7	6.4	140	18	473	9	11
Wheat							
Winter wheat ..... bushels	4.9	8.4	58	4	166	9	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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- Joshua Bates – Hemp, Oats, Soybeans ..... (202) 690-3234
- Natasha Bruton – Barley, Cotton System Consumption and Stocks, Grain Crushings ..... (202) 690-1042
- David Colwell – Fats and Oils, Flour Milling Products ..... (202) 720-8800
- Michelle Harder – County Estimates, Hay ..... (202) 690-8533
- James Johanson – Rye, Wheat ..... (202) 720-8068
- Chris Hawthorn – Corn, Flaxseed, Proso Millet ..... (202) 720-2127
- Becky Sommer – Cotton, Cotton Ginnings, Sorghum ..... (202) 720-5944
- Travis Thorson – Sunflower, Other Oilseeds ..... (202) 720-7369
- Lihan Wei – Peanuts, Rice ..... (202) 720-7688

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- 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, Kiwifruit, Lemons, Mandarins and tangerines, Mint, Mushrooms, Olives, Oranges, Pistachios ..... (202) 720-5412
- Chris Singh – Apples, Blueberries, Cucumbers, Hazelnuts, Potatoes, Pumpkins, Raspberries, Squash, Strawberries, Sugarbeets, Sugarcane, Sweet Potatoes ..... (202) 720-4285
- 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

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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.