Crop Production

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Special Note

When planting delays occur, NASS has established procedures and processes in place to re-contact respondents. Survey respondents in Minnesota, North Dakota, and South Dakota, who reported acreage as not yet planted for the *Acreage* report, released June 30, 2022, were re-contacted in July. Excessive rainfall delayed planting at the time of data collection of the survey, leaving a portion of acres still to be planted in these States.

Planted and harvested area estimates for the States and crops listed below were reviewed and any updates are included on page 6 in this report.

- **Minnesota**: barley, canola, corn, dry edible beans, oats, soybeans, sunflowers, and other spring wheat;
- **North Dakota**: barley, canola, corn, dry edible beans, oats, soybeans, sunflowers, and Durum & other spring wheat;
- **South Dakota**: barley, corn, oats, sorghum, soybeans, sunflowers, and other spring wheat.

Beginning in 2022, to allow for more complete information, potato area planted for certified seed data will be published in the *Crop Production* report released in September. Data has historically been published in the *Crop Production* report released in August.

Corn Production Down 5 Percent from 2021
Soybean Production Up 2 Percent from 2021
Cotton Production Down 28 Percent from 2021
Winter Wheat Production Down Less Than 1 Percent from July Forecast

Corn production for grain is forecast at 14.4 billion bushels, down 5 percent from 2021. Based on conditions as of August 1, yields are expected to average 175.4 bushels per harvested acre, down 1.6 bushels from last year. Area harvested for grain is forecast at 81.8 million acres, down less than 1 percent from the June forecast and down 4 percent from the previous year.

Soybean production for beans is forecast at a record high 4.53 billion bushels, up 2 percent from 2021. Based on conditions as of August 1, yields are expected to average a record high 51.9 bushels per harvested acre, up 0.5 bushel from 2021. Total planted area, at 88.0 million acres, is down less than 1 percent from the previous estimate but up 1 percent from the previous year. Area harvested for beans in the United States is forecast at 87.2 million acres, down less than 1 percent from the previous forecast but up 1 percent from 2021.

All cotton production is forecast at 12.6 million 480-pound bales, down 28 percent from 2021. Based on conditions as of August 1, yields are expected to average 846 pounds per harvested acre, up 27 pounds from 2021. Upland cotton production is forecast at 12.2 million 480-pound bales, down 29 percent from 2021. Pima cotton production is forecast at 407,000 bales, up 23 percent from 2021. All cotton area harvested is forecast at 7.13 million acres, down 31 percent from 2021.

All wheat production for grain is forecast at 1.78 billion bushels, up less than 1 percent from the previous forecast and up 8 percent from 2021. Based on August 1 conditions, yields are expected to average 47.5 bushels per harvested acre, up 0.2 bushel from the previous forecast and up 3.2 bushels from 2021. Area harvested for grain is forecast at 37.5 million acres, down less than 1 percent from the previous forecast, but up 1 percent from 2021.

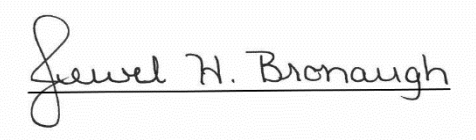
Winter wheat production is forecast at 1.20 billion bushels, down less than 1 percent from the July 1 forecast and down 6 percent from 2021. As of August 1, the United States yield is forecast at 47.9 bushels per acre, down 0.1 bushel from last month and down 2.3 bushels from last year's average yield of 50.2 bushels per acre. Area expected to be harvested for grain or seed totals 25.0 million acres, unchanged from the previous forecast, but down 2 percent from last year.

Hard Red Winter production, at 576 million bushels, is down 2 percent from last month. Soft Red Winter, at 381 million bushels, is up 2 percent from the July forecast. White Winter, at 240 million bushels, is up slightly from last month. Of the White Winter production, 14.6 million bushels are Hard White and 226 million bushels are Soft White.

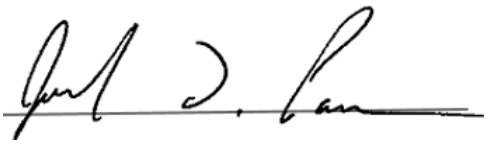
Durum wheat production is forecast at 73.6 million bushels, down 5 percent from the previous estimate, but up 97 percent from 2021. Based on August 1 conditions, yields are expected to average 40.4 bushels per harvested acre, up 0.1 bushel from the previous estimate and up 16.1 bushels from 2021. Area expected to be harvested for grain or seed totals 1.82 million acres, down 5 percent from the previous forecast, but up 19 percent from 2021.

Other spring wheat production for grain is forecast at 512 million bushels, up 2 percent from the previous forecast and up 55 percent from last year. Based on August 1 conditions, yields are expected to average 47.8 bushels per harvested acre, up 0.8 bushel from the previous forecast and up 15.2 bushels from 2021. Area harvested for grain or seed is expected to total 10.7 million acres, unchanged from the previous forecast, but 5 percent above 2021. Of the total production, 463 million bushels are Hard Red Spring wheat, up 56 percent from 2021.

This report was approved on August 12, 2022.



Deputy Secretary of
Agriculture
Jewel Bronaugh



Agricultural Statistics Board
Chairperson
Joseph L. Parsons

Contents

Updated Planted and Harvested Acres for Selected States, 2022 Crops

Crop	Minnesota		North Dakota		South Dakota		United States	
	Planted	Harvested	Planted	Harvested	Planted	Harvested	Planted	Harvested
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Barley	45.0	35.0	670.0	550.0	49.0	12.0	3,026.0	2,380.0
Canola	56.0	54.0	1,570.0	1,550.0	(NA)	(NA)	1,958.0	1,913.0
Corn	8,200.0	7,700.0	3,000.0	2,750.0	5,900.0	5,400.0	89,821.0	81,840.0
Dry Beans [1]	215.0	206.0	580.0	560.0	(NA)	(NA)	1,284.0	1,239.3
Oats	165.0	105.0	360.0	120.0	200.0	95.0	2,392.0	796.0
Sorghum	(NA)	(NA)	(NA)	(NA)	340.0	250.0	6,305.0	5,375.0
Soybeans	7,500.0	7,430.0	5,700.0	5,650.0	5,400.0	5,350.0	88,025.0	87,211.0
Sunflower, Non-Oil	3.0	2.7	55.0	52.0	25.0	23.0	123.0	114.7
Sunflower, Oil	71.0	69.0	680.0	660.0	580.0	560.0	1,544.0	1,487.5
Wheat, Durum	(NA)	(NA)	950.0	920.0	(NA)	(NA)	1,876.0	1,820.0
Wheat, Other Spring	1,250.0	1,160.0	5,400.0	5,250.0	770.0	730.0	11,110.0	10,705.0

(NA) Not available.

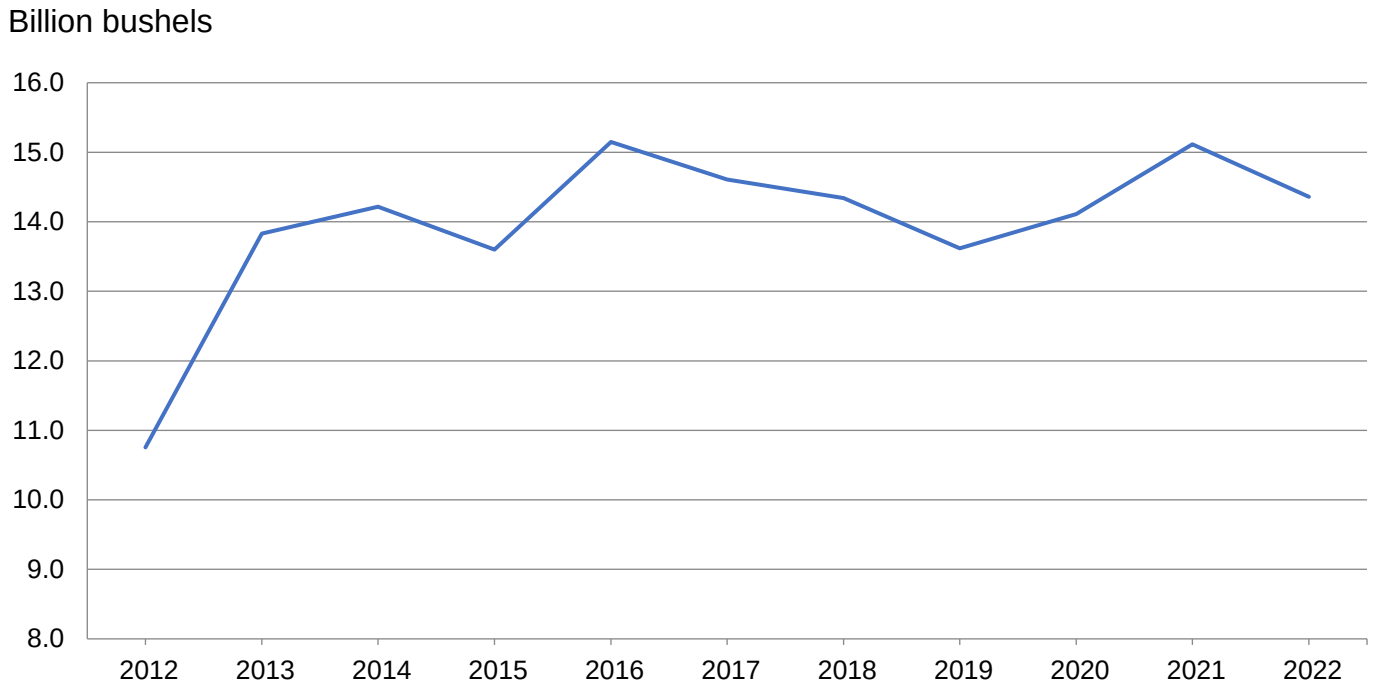
[1] All estimating States subject to updates per normal August procedures. Estimates for all States can be found on page 19.

Corn for Grain Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Alabama	345	290	163.0	134.0	56,235	38,860
Arkansas	830	690	184.0	178.0	152,720	122,820
California	50	20	188.0	220.0	9,400	4,400
Colorado	1,150	1,210	129.0	118.0	148,350	142,780
Delaware	172	162	184.0	172.0	31,648	27,864
Georgia	445	390	182.0	166.0	80,990	64,740
Idaho	120	120	210.0	210.0	25,200	25,200
Illinois	10,850	10,450	202.0	203.0	2,191,700	2,121,350
Indiana	5,270	4,950	195.0	189.0	1,027,650	935,550
Iowa	12,450	12,250	205.0	205.0	2,552,250	2,511,250
Kansas	5,400	5,050	139.0	123.0	750,600	621,150
Kentucky	1,440	1,390	192.0	147.0	276,480	204,330
Louisiana	565	485	183.0	175.0	103,395	84,875
Maryland	425	410	175.0	172.0	74,375	70,520
Michigan	1,990	1,890	174.0	170.0	346,260	321,300
Minnesota	7,840	7,700	178.0	193.0	1,395,520	1,486,100
Mississippi	700	590	181.0	178.0	126,700	105,020
Missouri	3,430	3,430	160.0	153.0	548,800	524,790
Nebraska	9,560	9,400	194.0	181.0	1,854,640	1,701,400
New York	585	590	167.0	150.0	97,695	88,500
North Carolina	905	840	149.0	108.0	134,845	90,720
North Dakota	3,630	2,750	105.0	145.0	381,150	398,750
Ohio	3,340	3,170	193.0	190.0	644,620	602,300
Oklahoma	295	330	150.0	130.0	44,250	42,900
Pennsylvania	990	885	169.0	158.0	167,310	139,830
South Carolina	380	300	139.0	128.0	52,820	38,400
South Dakota	5,480	5,400	135.0	147.0	739,800	793,800
Tennessee	960	920	170.0	130.0	163,200	119,600
Texas	1,850	1,900	128.0	120.0	236,800	228,000
Virginia	370	390	160.0	160.0	59,200	62,400
Washington	85	95	248.0	255.0	21,080	24,225
Wisconsin	3,040	3,000	180.0	185.0	547,200	555,000
Other States [1]	446	393	162.1	152.6	72,287	59,955
United States	85,388	81,840	177.0	175.4	15,115,170	14,358,679

[1] Other States include Arizona, Florida, Montana, New Jersey, New Mexico, Oregon, Utah, West Virginia, and Wyoming. Individual State level estimates will be published in the *Crop Production 2022 Summary.*

Corn Production – United States



Sorghum for Grain Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Colorado	400	385	37.0	32.0	14,800	12,320
Kansas	3,400	2,900	78.0	61.0	265,200	176,900
Nebraska	230	280	86.0	60.0	19,780	16,800
Oklahoma	380	310	54.0	35.0	20,520	10,850
South Dakota	210	250	64.0	67.0	13,440	16,750
Texas	1,870	1,250	61.0	42.0	114,070	52,500
United States	6,490	5,375	69.0	53.2	447,810	286,120

Oat Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				July 1	August 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
California	5	5	65.0	65.0	65.0	325	325
Idaho	13	13	72.0	90.0	85.0	936	1,105
Illinois	15	10	83.0	82.0	90.0	1,245	900
Iowa	52	35	77.0	76.0	70.0	4,004	2,450
Kansas	20	21	50.0	45.0	60.0	1,000	1,260
Maine	19	23	78.0	70.0	65.0	1,482	1,495
Michigan	20	30	63.0	59.0	62.0	1,260	1,860
Minnesota	77	105	57.0	62.0	60.0	4,389	6,300
Montana	16	30	35.0	20.0	30.0	560	900
Nebraska	26	23	56.0	41.0	40.0	1,456	920
New York	29	39	68.0	65.0	69.0	1,972	2,691
North Dakota	83	120	48.0	86.0	89.0	3,984	10,680
Ohio	20	25	67.0	67.0	66.0	1,340	1,650
Oregon	6	6	62.0	75.0	100.0	372	600
Pennsylvania	36	48	65.0	56.0	60.0	2,340	2,880
South Dakota	56	95	67.0	86.0	72.0	3,752	6,840
Texas	35	50	45.0	47.0	47.0	1,575	2,350
Wisconsin	61	65	62.0	61.0	61.0	3,782	3,965
Other States [1]	61	53	66.6	58.6	64.2	4,062	3,405
United States	650	796	61.3	66.1	66.1	39,836	52,576

[1] Other States include: Arkansas, Georgia, Missouri, North Carolina, and Oklahoma. Individual State level estimates will be published in the *Small Grains 2022 Summary.*

Barley Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				July 1	August 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arizona	14	16	125.0	126.0	126.0	1,750	2,016
California	13	22	63.0	45.0	45.0	819	990
Colorado	47	60	111.0	137.0	127.0	5,217	7,620
Idaho	490	560	89.0	111.0	95.0	43,610	53,200
Minnesota	34	35	55.0	65.0	56.0	1,870	1,960
Montana	625	855	38.0	42.0	42.0	23,750	35,910
North Dakota	430	550	51.0	73.0	62.0	21,930	34,100
Virginia	7	11	75.0	78.0	77.0	525	847
Washington	70	75	38.0	78.0	77.0	2,660	5,775
Wyoming	70	51	91.0	99.0	103.0	6,370	5,253
Other States [1]	148	145	62.0	70.9	70.2	9,172	10,177
United States	1,948	2,380	60.4	73.0	66.3	117,673	157,848

[1] Other States include: Alaska, Delaware, Kansas, Maine, Maryland, Michigan, New York, North Carolina, Oregon, Pennsylvania, South Dakota, Utah, and Wisconsin. Individual State level estimates will be published in the *Small Grains 2022 Summary.*

Winter Wheat Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				July 1	August 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arkansas	145	170	58.0	58.0	58.0	8,410	9,860
California	80	120	82.0	43.0	43.0	6,560	5,160
Colorado	1,880	1,650	37.0	27.0	26.0	69,560	42,900
Idaho	640	720	71.0	91.0	91.0	45,440	65,520
Illinois	610	720	79.0	79.0	79.0	48,190	56,880
Indiana	270	250	85.0	82.0	82.0	22,950	20,500
Kansas	7,000	6,850	52.0	39.0	38.0	364,000	260,300
Kentucky	350	400	87.0	77.0	82.0	30,450	32,800
Maryland	160	175	79.0	79.0	74.0	12,640	12,950
Michigan	560	425	81.0	79.0	84.0	45,360	35,700
Mississippi	70	75	59.0	53.0	53.0	4,130	3,975
Missouri	490	660	65.0	63.0	66.0	31,850	43,560
Montana	1,730	1,900	31.0	34.0	35.0	53,630	66,500
Nebraska	840	860	49.0	37.0	34.0	41,160	29,240
North Carolina	345	395	56.0	67.0	65.0	19,320	25,675
North Dakota	60	90	33.0	58.0	58.0	1,980	5,220
Ohio	515	480	85.0	76.0	78.0	43,775	37,440
Oklahoma	2,950	2,700	39.0	27.0	27.0	115,050	72,900
Oregon	705	715	45.0	65.0	67.0	31,725	47,905
South Dakota	720	760	38.0	54.0	52.0	27,360	39,520
Tennessee	330	365	71.0	71.0	71.0	23,430	25,915
Texas	2,000	1,300	37.0	27.0	28.0	74,000	36,400
Virginia	120	170	67.0	64.0	66.0	8,040	11,220
Washington	1,690	1,790	42.0	73.0	72.0	70,980	128,880
Wisconsin	245	260	75.0	76.0	77.0	18,375	20,020
Other States [1]	959	1,002	61.5	59.9	60.6	59,000	60,710
United States	25,464	25,002	50.2	48.0	47.9	1,277,365	1,197,650

[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 2022 Summary.*

Durum Wheat Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				July 1	August 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arizona	52	89	90.0	102.0	102.0	4,680	9,078
California	20	35	110.0	112.0	112.0	2,200	3,920
Idaho	7	6	77.0	85.0	85.0	539	510
Montana	635	770	16.0	30.0	29.0	10,160	22,330
North Dakota	820	920	24.0	40.0	41.0	19,680	37,720
United States	1,534	1,820	24.3	40.3	40.4	37,259	73,558

Other Spring Wheat Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				July 1	August 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Idaho	485	450	63.0	92.0	94.0	30,555	42,300
Minnesota	1,160	1,160	48.0	53.0	56.0	55,680	64,960
Montana	2,180	2,650	17.0	28.0	28.0	37,060	74,200
North Dakota	5,210	5,250	33.5	51.0	52.0	174,535	273,000
South Dakota	590	730	29.0	49.0	44.0	17,110	32,120
Washington	540	465	30.0	48.0	54.0	16,200	25,110
United States	10,165	10,705	32.6	47.0	47.8	331,140	511,690

Wheat Production by Class – United States: 2021 and Forecasted August 1, 2022

[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]

Crop	2021	2022
	(1,000 bushels)	(1,000 bushels)
Winter		
Hard red	749,489	576,173
Soft red	360,689	381,326
Hard white	20,283	14,632
Soft white	146,904	225,519
Spring		
Hard red	297,366	462,680
Hard white	5,662	7,865
Soft white	28,112	41,145
Durum	37,259	73,558
Total	1,645,764	1,782,898

Rice Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production [1]	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(pounds)	(pounds)	(1,000 cwt)	(1,000 cwt)
Arkansas	1,194	1,136	7,630	7,550	91,136	85,768
California	405	283	9,050	9,000	36,653	25,470
Louisiana	414	434	6,870	6,750	28,447	29,295
Mississippi	100	98	7,540	7,450	7,540	7,301
Missouri	194	184	8,040	7,800	15,599	14,352
Texas	181	173	6,860	8,000	12,421	13,840
United States	2,488	2,308	7,709	7,627	191,796	176,026

[1] Includes sweet rice production.

Rice Production by Class – United States: 2021 and Forecasted August 1, 2022

Year	Long grain	Medium grain	Short grain [1]	All
	(1,000 cwt)	(1,000 cwt)	(1,000 cwt)	(1,000 cwt)
2021	144,639	44,494	2,663	191,796
2022 [2]	140,314	34,234	1,478	176,026

[1] Sweet rice production included with short grain.
[2] The 2022 rice production by class forecasts are based on class harvested acreage estimates and the 5-year average class yield compared to the all rice yield.

Alfalfa and Alfalfa Mixtures for Hay Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(tons)	(tons)	(1,000 tons)	(1,000 tons)
Arizona	275	295	8.30	8.30	2,283	2,449
California	500	490	7.40	7.30	3,700	3,577
Colorado	780	690	4.00	2.90	3,120	2,001
Idaho	960	1,000	4.10	4.50	3,936	4,500
Illinois	290	300	3.75	4.25	1,088	1,275
Indiana	260	280	3.30	2.90	858	812
Iowa	910	620	3.50	3.50	3,185	2,170
Kansas	690	700	3.60	3.40	2,484	2,380
Kentucky	100	100	3.30	3.00	330	300
Michigan	560	570	3.10	1.90	1,736	1,083
Minnesota	670	670	2.60	2.90	1,742	1,943
Missouri	240	210	3.05	2.00	732	420
Montana	1,550	1,650	1.70	1.80	2,635	2,970
Nebraska	910	810	4.10	3.00	3,731	2,430
Nevada	210	190	5.10	4.50	1,071	855
New Mexico	125	125	5.00	5.20	625	650
New York	270	240	2.20	2.40	594	576
North Dakota	920	1,050	0.90	2.10	828	2,205
Ohio	300	300	3.10	3.30	930	990
Oklahoma	180	220	3.10	3.20	558	704
Oregon	400	370	3.40	4.20	1,360	1,554
Pennsylvania	320	400	2.90	3.10	928	1,240
South Dakota	1,300	1,600	1.50	1.90	1,950	3,040
Texas	100	95	5.40	3.80	540	361
Utah	490	470	3.70	3.80	1,813	1,786
Virginia	30	35	2.90	3.80	87	133
Washington	390	390	4.60	4.40	1,794	1,716
Wisconsin	910	890	3.20	3.10	2,912	2,759
Wyoming	470	570	2.80	3.20	1,316	1,824
Other States [1]	136	135	2.79	2.94	379	397
United States	15,246	15,465	3.23	3.17	49,245	49,100

[1] Other States include Arkansas, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, North Carolina, Rhode Island, Tennessee, Vermont, and West Virginia. Individual State level estimates will be published in the *Crop Production 2022 Summary.*

All Other Hay Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(tons)	(tons)	(1,000 tons)	(1,000 tons)
Alabama [1]	700	700	3.10	2.70	2,170	1,890
Arkansas	1,180	1,200	2.20	1.70	2,596	2,040
California	330	360	4.40	4.90	1,452	1,764
Colorado	700	650	1.95	1.70	1,365	1,105
Georgia [1]	540	560	3.20	2.30	1,728	1,288
Idaho	280	290	2.20	2.40	616	696
Illinois	210	220	2.30	2.40	483	528
Indiana	280	260	2.50	2.10	700	546
Iowa	350	410	2.70	2.00	945	820
Kansas	2,000	2,000	1.65	1.55	3,300	3,100
Kentucky	2,020	1,970	2.60	2.20	5,252	4,334
Louisiana [1]	370	400	2.60	2.40	962	960
Michigan	230	230	1.90	2.00	437	460
Minnesota	420	530	1.40	1.80	588	954
Mississippi [1]	620	610	2.20	2.10	1,364	1,281
Missouri	2,900	2,800	2.00	1.75	5,800	4,900
Montana	740	850	1.30	1.30	962	1,105
Nebraska	1,650	1,500	1.55	1.60	2,558	2,400
New York	890	1,060	2.30	2.20	2,047	2,332
North Carolina	675	650	2.10	2.10	1,418	1,365
North Dakota	1,100	1,250	1.15	1.70	1,265	2,125
Ohio	570	570	2.50	2.40	1,425	1,368
Oklahoma	2,770	2,700	1.60	1.40	4,432	3,780
Oregon	490	600	2.20	2.60	1,078	1,560
Pennsylvania	900	1,000	2.45	2.30	2,205	2,300
South Dakota	1,100	1,400	1.05	1.50	1,155	2,100
Tennessee	1,690	1,650	2.35	2.10	3,972	3,465
Texas	5,500	4,850	1.85	1.50	10,175	7,275
Virginia	1,000	1,100	2.00	2.30	2,000	2,530
Washington	320	350	2.40	2.50	768	875
West Virginia	500	550	1.70	1.70	850	935
Wisconsin	320	490	1.90	1.60	608	784
Wyoming	470	520	1.40	1.60	658	832
Other States [2]	1,675	1,762	2.16	2.19	3,617	3,862
United States	35,490	36,042	2.00	1.88	70,951	67,659

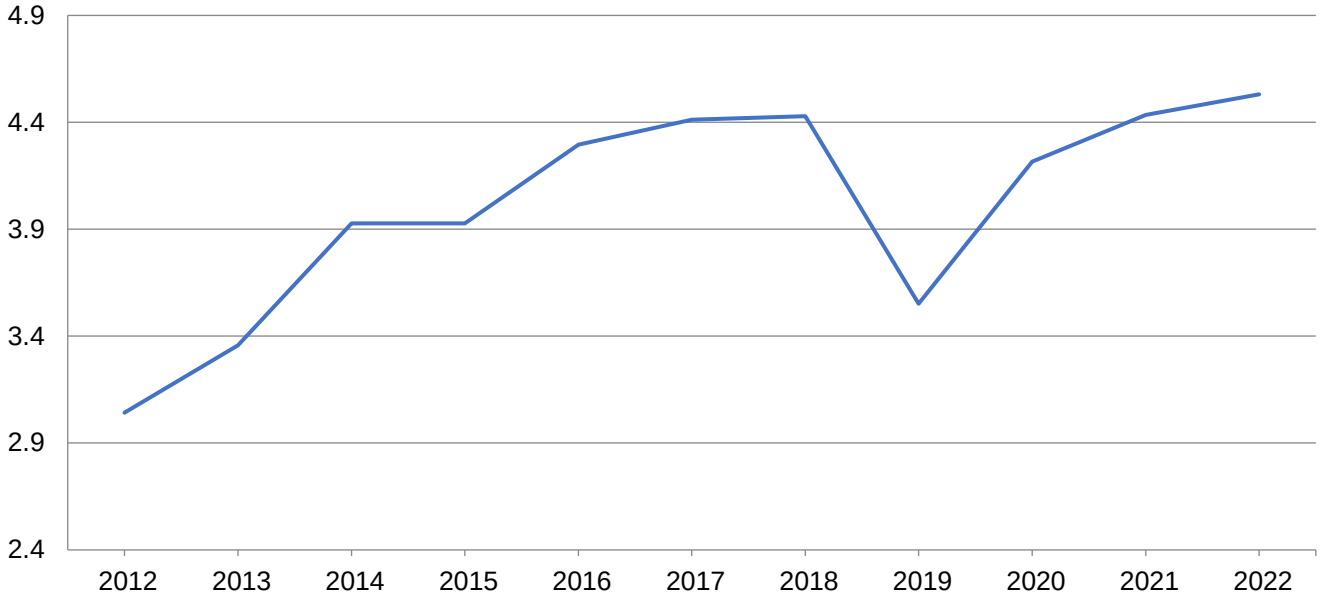
[1] Alfalfa and alfalfa mixtures included in all other hay.
[2] Other States include Alaska, Arizona, Connecticut, Delaware, Florida, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New Mexico, Rhode Island, South Carolina, Utah, and Vermont. Individual State level estimates will be published in the *Crop Production 2022 Summary.*

Soybeans for Beans Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Alabama	305	345	46.0	42.0	14,030	14,490
Arkansas	3,010	3,170	51.0	53.0	153,510	168,010
Delaware	153	153	51.0	46.0	7,803	7,038
Georgia	135	125	46.0	44.0	6,210	5,500
Illinois	10,510	11,100	64.0	66.0	672,640	732,600
Indiana	5,640	5,830	59.5	60.0	335,580	349,800
Iowa	10,030	10,220	62.0	58.0	621,860	592,760
Kansas	4,800	4,950	39.5	40.0	189,600	198,000
Kentucky	1,840	2,040	56.0	54.0	103,040	110,160
Louisiana	1,060	1,130	52.0	52.0	55,120	58,760
Maryland	485	485	53.0	53.0	25,705	25,705
Michigan	2,140	2,230	51.0	47.0	109,140	104,810
Minnesota	7,580	7,430	47.0	50.0	356,260	371,500
Mississippi	2,180	2,270	54.0	55.0	117,720	124,850
Missouri	5,650	5,850	49.0	49.0	276,850	286,650
Nebraska	5,570	5,550	63.0	55.0	350,910	305,250
New Jersey	99	108	46.0	36.0	4,554	3,888
New York	320	325	53.0	51.0	16,960	16,575
North Carolina	1,640	1,790	40.0	37.0	65,600	66,230
North Dakota	7,120	5,650	25.5	35.0	181,560	197,750
Ohio	4,880	4,930	56.5	57.0	275,720	281,010
Oklahoma	535	460	23.0	19.0	12,305	8,740
Pennsylvania	595	595	53.0	50.0	31,535	29,750
South Carolina	385	385	38.0	35.0	14,630	13,475
South Dakota	5,390	5,350	40.0	43.0	215,600	230,050
Tennessee	1,520	1,770	50.0	44.0	76,000	77,880
Texas	100	80	38.0	30.0	3,800	2,400
Virginia	590	670	46.0	47.0	27,140	31,490
Wisconsin	2,070	2,220	55.0	52.0	113,850	115,440
United States	86,332	87,211	51.4	51.9	4,435,232	4,530,561

Soybean Production – United States

Billion bushels



Peanut Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(pounds)	(pounds)	(1,000 pounds)	(1,000 pounds)
Alabama	183.0	187.0	3,400	4,000	622,200	748,000
Arkansas	35.0	29.0	5,000	5,000	175,000	145,000
Florida	162.0	150.0	3,650	4,300	591,300	645,000
Georgia	750.0	725.0	4,450	4,500	3,337,500	3,262,500
Mississippi	17.0	19.0	4,200	4,100	71,400	77,900
New Mexico	11.0	11.0	2,600	3,000	28,600	33,000
North Carolina	114.0	119.0	4,350	4,200	495,900	499,800
Oklahoma	15.0	14.0	4,400	4,200	66,000	58,800
South Carolina	66.0	62.0	4,200	4,200	277,200	260,400
Texas	162.0	155.0	3,600	2,100	583,200	325,500
Virginia	30.0	31.0	4,700	4,700	141,000	145,700
United States	1,545.0	1,502.0	4,135	4,129	6,389,300	6,201,600

Cotton Area Harvested, Yield, and Production by Type – States and United States: 2021 and Forecasted August 1, 2022

Type and State	Area harvested		Yield per acre		Production [1]	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(pounds)	(pounds)	(1,000 bales) [2]	(1,000 bales) [2]
Upland						
Alabama	401.0	420.0	826	851	690.0	745.0
Arizona	119.0	81.0	1,275	1,280	316.0	216.0
Arkansas	475.0	490.0	1,248	1,195	1,235.0	1,220.0
California	25.5	29.5	1,920	1,708	102.0	105.0
Florida	90.0	93.0	640	800	120.0	155.0
Georgia	1,160.0	1,190.0	914	928	2,210.0	2,300.0
Kansas	102.0	120.0	880	680	187.0	170.0
Louisiana	104.0	165.0	1,011	960	219.0	330.0
Mississippi	430.0	485.0	997	1,029	893.0	1,040.0
Missouri	310.0	320.0	1,260	975	814.0	650.0
New Mexico	26.0	44.0	1,108	709	60.0	65.0
North Carolina	365.0	430.0	1,017	871	773.0	780.0
Oklahoma	440.0	260.0	756	498	693.0	270.0
South Carolina	207.0	255.0	986	894	425.0	475.0
Tennessee	270.0	315.0	1,036	869	583.0	570.0
Texas	5,550.0	2,200.0	666	633	7,700.0	2,900.0
Virginia	74.0	79.0	1,109	1,045	171.0	172.0
United States	10,148.5	6,976.5	813	837	17,191.0	12,163.0
American Pima						
Arizona	8.8	20.0	982	1,008	18.0	42.0
California	87.0	94.0	1,501	1,506	272.0	295.0
New Mexico	12.0	18.5	640	934	16.0	36.0
Texas	16.0	20.0	780	816	26.0	34.0
United States	123.8	152.5	1,287	1,281	332.0	407.0
All						
Alabama	401.0	420.0	826	851	690.0	745.0
Arizona	127.8	101.0	1,254	1,226	334.0	258.0
Arkansas	475.0	490.0	1,248	1,195	1,235.0	1,220.0
California	112.5	123.5	1,596	1,555	374.0	400.0
Florida	90.0	93.0	640	800	120.0	155.0
Georgia	1,160.0	1,190.0	914	928	2,210.0	2,300.0
Kansas	102.0	120.0	880	680	187.0	170.0
Louisiana	104.0	165.0	1,011	960	219.0	330.0
Mississippi	430.0	485.0	997	1,029	893.0	1,040.0
Missouri	310.0	320.0	1,260	975	814.0	650.0
New Mexico	38.0	62.5	960	776	76.0	101.0
North Carolina	365.0	430.0	1,017	871	773.0	780.0
Oklahoma	440.0	260.0	756	498	693.0	270.0
South Carolina	207.0	255.0	986	894	425.0	475.0
Tennessee	270.0	315.0	1,036	869	583.0	570.0
Texas	5,566.0	2,220.0	666	634	7,726.0	2,934.0
Virginia	74.0	79.0	1,109	1,045	171.0	172.0
United States	10,272.3	7,129.0	819	846	17,523.0	12,570.0

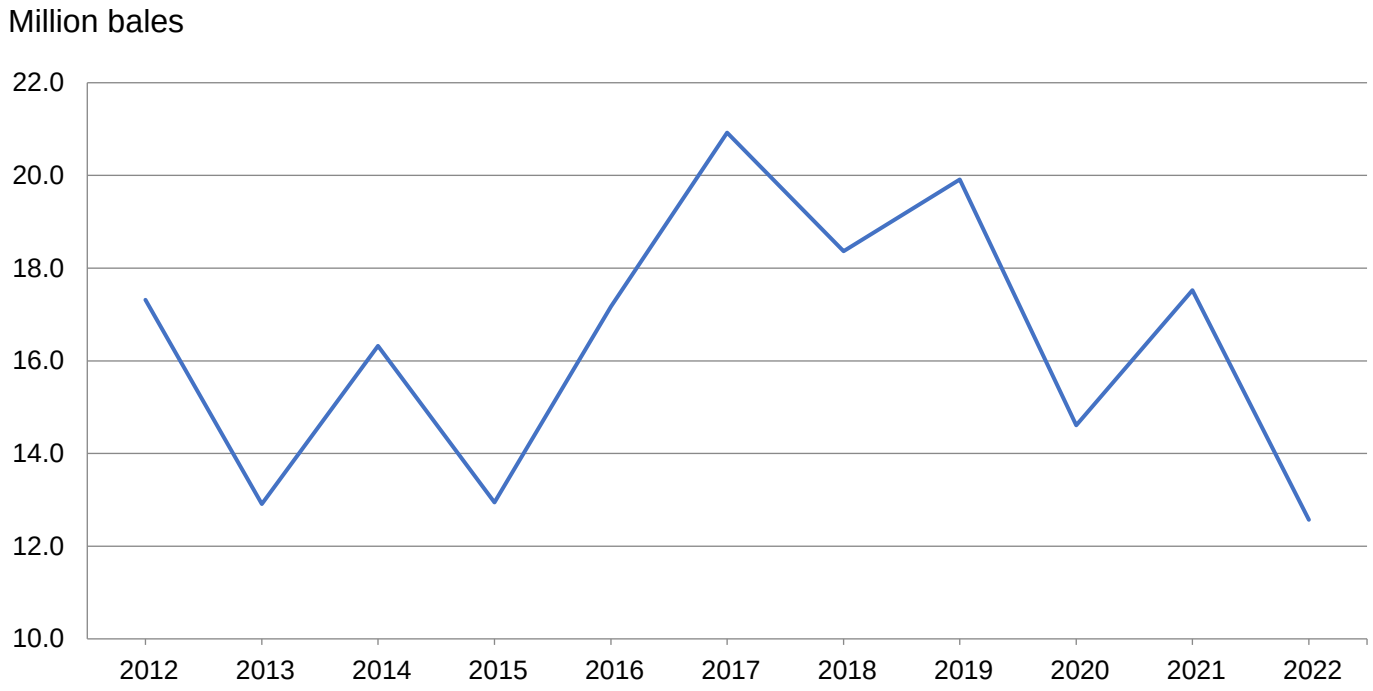
[1] Production ginned and to be ginned.
[2] 480-pound net weight bales.

Cottonseed Production – United States: 2021 and Forecasted August 1, 2022

State	Production	
	2021	2022 [1]
	(1,000 tons)	(1,000 tons)
United States	5,323.0	3,813.0

[1] Based on a 3-year average lint-seed ratio.

Cotton Production - United States



Dry Edible Bean Area Planted and Harvested – States and United States: 2021 and 2022

[Includes updates to planted and harvested area previously published. Excludes beans grown for garden seed and chickpeas]

State	Area planted		Area harvested	
	2021	2022	2021	2022 [1]
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
California	16.0	12.0	15.4	11.8
Colorado	33.0	37.0	32.0	35.0
Idaho	58.0	48.0	57.0	47.0
Michigan	210.0	220.0	208.0	218.0
Minnesota	240.0	215.0	234.0	206.0
Nebraska	120.0	125.0	114.0	116.0
North Dakota	660.0	580.0	620.0	560.0
Washington	40.0	31.0	39.5	30.5
Wyoming	17.0	16.0	15.7	15.0
United States	1,394.0	1,284.0	1,335.6	1,239.3

[1] Forecasted.

Dry Edible Bean Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

[Excludes beans grown for garden seed and chickpeas]

State	Area harvested		Yield per acre [1]		Production [1]	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(pounds)	(pounds)	(1,000 cwt)	(1,000 cwt)
California	15.4	11.8	2,450	2,310	377	273
Colorado	32.0	35.0	1,880	1,980	602	693
Idaho	57.0	47.0	2,610	2,750	1,486	1,293
Michigan	208.0	218.0	2,410	2,300	5,011	5,014
Minnesota	234.0	206.0	1,960	2,200	4,596	4,532
Nebraska	114.0	116.0	2,440	2,200	2,780	2,552
North Dakota	620.0	560.0	1,030	1,600	6,397	8,960
Washington	39.5	30.5	2,770	2,780	1,094	848
Wyoming	15.7	15.0	2,410	2,400	378	360
United States	1,335.6	1,239.3	1,701	1,979	22,721	24,525

[1] Clean basis.

Dry Edible Bean Area Planted by Commercial Class – States and United States: 2021 and Forecasted August 1, 2022

[Excludes beans grown for garden seed and chickpeas]

Class and State	2021	2022
	(1,000 acres)	(1,000 acres)
Large lima		
California	5.8	5.8
Colorado	-	-
Idaho	(D)	(D)
Michigan	(D)	(D)
Minnesota	(D)	(D)
Nebraska	-	-
North Dakota	-	-
Washington	(D)	(D)
Wyoming	-	-
Other States [1]	1.6	1.2
United States	7.4	7.0
Baby lima		
California	3.5	2.5
Colorado	-	-
Idaho	0.7	(D)
Michigan	(D)	-
Minnesota	(D)	(D)
Nebraska	-	-
North Dakota	-	-
Washington	(D)	(D)
Wyoming	-	-
Other States [1]	3.3	3.2
United States	7.5	5.7
Navy		
California	-	-
Colorado	(D)	-
Idaho	1.0	(D)
Michigan	68.0	62.0
Minnesota	50.5	48.0
Nebraska	(D)	(D)
North Dakota	76.0	56.0
Washington	(D)	1.4
Wyoming	-	-
Other States [1]	1.2	1.1
United States	196.7	168.5

See footnote(s) at end of table.

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Dry Edible Bean Area Planted by Commercial Class – States and United States: 2021 and Forecasted August 1, 2022 (continued)

[Excludes beans grown for garden seed and chickpeas]

Class and State	2021	2022
	(1,000 acres)	(1,000 acres)
Great northern		
California	-	-
Colorado	(D)	-
Idaho	3.7	2.5
Michigan	(D)	(D)
Minnesota	(D)	-
Nebraska	36.5	24.0
North Dakota	9.4	(D)
Washington	1.2	(D)
Wyoming	0.6	(D)
Other States [1]	3.7	2.7
United States	55.1	29.2
Small white		
California	-	-
Colorado	(D)	-
Idaho	2.3	1.0
Michigan	(D)	-
Minnesota	(D)	(D)
Nebraska	(D)	(D)
North Dakota	-	-
Washington	1.2	0.6
Wyoming	-	-
Other States [1]	2.4	0.5
United States	5.9	2.1

See footnote(s) at end of table.

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Dry Edible Bean Area Planted by Commercial Class – States and United States: 2021 and Forecasted August 1, 2022 (continued)

[Excludes beans grown for garden seed and chickpeas]

Class and State	2021	2022
	(1,000 acres)	(1,000 acres)
Pinto		
California	-	(D)
Colorado	20.0	25.0
Idaho	20.0	16.0
Michigan	2.5	(D)
Minnesota	18.2	13.0
Nebraska	58.0	81.3
North Dakota	456.0	418.0
Washington	11.2	9.4
Wyoming	13.5	14.4
Other States [1]	-	1.2
United States	599.4	578.3
Light red kidney		
California	(D)	-
Colorado	5.8	3.7
Idaho	1.9	2.5
Michigan	7.5	7.0
Minnesota	25.6	25.0
Nebraska	10.3	6.2
North Dakota	(D)	(D)
Washington	3.7	1.5
Wyoming	-	(D)
Other States [1]	3.2	3.6
United States	58.0	49.5
Dark red kidney		
California	(D)	(D)
Colorado	-	-
Idaho	4.2	2.0
Michigan	2.5	1.5
Minnesota	67.4	47.0
Nebraska	-	(D)
North Dakota	(D)	(D)
Washington	1.1	1.0
Wyoming	(D)	-
Other States [1]	7.7	2.2
United States	82.9	53.7

See footnote(s) at end of table.

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Dry Edible Bean Area Planted by Commercial Class – States and United States: 2021 and Forecasted August 1, 2022 (continued)

[Excludes beans grown for garden seed and chickpeas]

Class and State	2021	2022
	(1,000 acres)	(1,000 acres)
Pink		
California	(D)	-
Colorado	-	(D)
Idaho	6.7	5.0
Michigan	-	(D)
Minnesota	(D)	(D)
Nebraska	(D)	(D)
North Dakota	5.8	5.5
Washington	(D)	(D)
Wyoming	(D)	-
Other States [1]	5.5	8.7
United States	18.0	19.2
Small red		
California	-	-
Colorado	(D)	(D)
Idaho	4.8	5.5
Michigan	20.0	18.0
Minnesota	(D)	(D)
Nebraska	(D)	(D)
North Dakota	16.8	14.0
Washington	2.2	1.6
Wyoming	(D)	-
Other States [1]	4.6	3.2
United States	48.4	42.3
Cranberry		
California	(D)	(D)
Colorado	-	-
Idaho	(D)	0.7
Michigan	2.5	3.5
Minnesota	(D)	(D)
Nebraska	-	-
North Dakota	(D)	(D)
Washington	(D)	3.0
Wyoming	-	-
Other States [1]	10.7	5.2
United States	13.2	12.4

See footnote(s) at end of table.

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Dry Edible Bean Area Planted by Commercial Class – States and United States: 2021 and Forecasted August 1, 2022 (continued)

[Excludes beans grown for garden seed and chickpeas]

Class and State	2021	2022
	(1,000 acres)	(1,000 acres)
Black		
California	(D)	(D)
Colorado	(D)	0.5
Idaho	3.9	4.2
Michigan	98.0	123.0
Minnesota	61.1	66.0
Nebraska	(D)	(D)
North Dakota	82.0	74.0
Washington	5.6	6.0
Wyoming	0.8	1.0
Other States [1]	5.9	5.2
United States	257.3	279.9
Blackeye		
California	3.5	1.8
Colorado	(D)	2.4
Idaho	(D)	-
Michigan	(D)	-
Minnesota	(D)	(D)
Nebraska	(D)	(D)
North Dakota	(D)	(D)
Washington	(D)	(D)
Wyoming	-	-
Other States [1]	9.6	5.9
United States	13.1	10.1
Other		
California	1.1	1.2
Colorado	4.5	5.1
Idaho	7.5	7.3
Michigan	(D)	(D)
Minnesota	(D)	(D)
Nebraska	(D)	(D)
North Dakota	(D)	(D)
Washington	3.8	2.6
Wyoming	(D)	(D)
Other States [1]	14.2	9.9
United States	31.1	26.1

- Represents zero.
(D) Withheld to avoid disclosing data for individual operations.
[1] Includes data withheld above.

Sugarbeet Area Harvested, Yield, and Production — States and United States: 2021 and Forecasted August 1, 2022

[Relates to year of intended harvest in all States except California]

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(tons)	(tons)	(1,000 tons)	(1,000 tons)
California [1]	23.8	23.9	46.0	46.7	1,095	1,116
Colorado	23.6	22.4	33.7	29.6	795	663
Idaho	170.0	170.0	39.5	39.0	6,715	6,630
Michigan	142.0	137.0	37.4	31.0	5,311	4,247
Minnesota	396.0	441.0	31.0	25.4	12,276	11,201
Montana	43.5	33.5	29.8	30.0	1,296	1,005
Nebraska	43.8	44.4	31.9	30.6	1,397	1,359
North Dakota	222.0	235.0	29.2	25.6	6,482	6,016
Oregon	10.4	7.9	37.9	38.5	394	304
Washington	1.9	2.0	45.9	45.8	87	92
Wyoming	30.6	29.0	29.5	29.4	903	853
United States	1,107.6	1,146.1	33.2	29.2	36,751	33,486

[1] Relates to year of planting for overwintered beets in southern California.

Sugarcane for Sugar and Seed Area Harvested, Yield, and Production - States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre [1]		Production [1]	
	2021	2022	2021	2022	2021	2022
	(1,000 acres)	(1,000 acres)	(tons)	(tons)	(1,000 tons)	(1,000 tons)
Florida	403.5	400.0	42.6	43.8	17,187	17,520
Louisiana	495.3	487.0	29.3	31.3	14,525	15,243
Texas	36.4	32.3	30.9	27.8	1,126	898
United States	935.2	919.3	35.1	36.6	32,838	33,661

[1] Net tons.

Tobacco Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(acres)	(acres)	(pounds)	(pounds)	(1,000 pounds)	(1,000 pounds)
Georgia	8,000	7,000	1,800	1,900	14,400	13,300
Kentucky	49,800	50,000	2,351	2,150	117,060	107,520
North Carolina	120,250	124,200	2,099	1,999	252,400	248,300
Pennsylvania	5,350	5,300	2,621	2,343	14,020	12,420
South Carolina	7,600	6,000	1,800	2,000	13,680	12,000
Tennessee	12,900	13,700	2,477	2,301	31,950	31,530
Virginia	15,030	14,530	2,293	2,003	34,463	29,099
United States	218,930	220,730	2,183	2,058	477,973	454,169

Tobacco Area Harvested, Yield, and Production by Class and Type – States and United States: 2021 and Forecasted August 1, 2022

Class, type, and State	Area harvested		Yield per acre			Production	
	2021	2022	2021	2022		2021	2022
				July 1	August 1		
	(acres)	(acres)	(pounds)	(pounds)	(pounds)	(1,000 pounds)	(1,000 pounds)
Class 1, Flue-cured (11-14)							
Georgia	8,000	7,000	1,800	1,900	1,900	14,400	13,300
North Carolina	120,000	124,000	2,100	1,800	2,000	252,000	248,000
South Carolina	7,600	6,000	1,800	1,800	2,000	13,680	12,000
Virginia	14,500	14,000	2,300	2,100	2,000	33,350	28,000
United States	150,100	151,000	2,088	1,833	1,995	313,430	301,300
Class 2, Fire-cured (21-23)							
Kentucky	8,700	9,900	3,350	(NA)	3,200	29,145	31,680
Tennessee	6,000	6,300	3,100	(NA)	2,800	18,600	17,640
Virginia	170	230	2,100	(NA)	2,300	357	529
United States	14,870	16,430	3,235	(NA)	3,034	48,102	49,849
Class 3A, Light air-cured							
Type 31, Burley							
Kentucky	35,000	34,000	2,050	(NA)	1,800	71,750	61,200
North Carolina	250	200	1,600	(NA)	1,500	400	300
Pennsylvania	2,500	1,400	2,800	(NA)	2,200	7,000	3,080
Tennessee	2,900	3,000	1,500	(NA)	1,550	4,350	4,650
Virginia	360	300	2,100	(NA)	1,900	756	570
United States	41,010	38,900	2,055	(NA)	1,794	84,256	69,800
Type 32, Southern Maryland Belt							
Pennsylvania	350	200	2,200	(NA)	2,300	770	460
United States	350	200	2,200	(NA)	2,300	770	460
Total light air-cured (31-32)	41,360	39,100	2,056	(NA)	1,797	85,026	70,260
Class 3B, Dark air-cured (35-37)							
Kentucky	6,100	6,100	2,650	(NA)	2,400	16,165	14,640
Tennessee	4,000	4,400	2,250	(NA)	2,100	9,000	9,240
United States	10,100	10,500	2,492	(NA)	2,274	25,165	23,880
Class 4, Cigar filler							
Type 41, Pennsylvania Seedleaf							
Pennsylvania	2,500	3,700	2,500	(NA)	2,400	6,250	8,880
United States	2,500	3,700	2,500	(NA)	2,400	6,250	8,880
All tobacco							
United States	218,930	220,730	2,183	(NA)	2,058	477,973	454,169

(NA) Not available.

Hop Area Harvested, Yield, and Production – States and United States: 2021 and Forecasted August 1, 2022

State	Area harvested		Yield per acre		Production	
	2021	2022	2021	2022	2021	2022
	(acres)	(acres)	(pounds)	(pounds)	(1,000 pounds)	(1,000 pounds)
Idaho	9,694	9,440	1,900	1,800	18,414.8	16,992.0
Oregon	7,395	8,100	1,705	1,760	12,607.9	14,256.0
Washington	43,783	42,430	1,932	1,980	84,608.2	84,011.4
United States	60,872	59,970	1,900	1,922	115,630.9	115,259.4

Commercial Apple Production – States and United States: 2021 and Forecasted August 1, 2022

State	Total production	
	2021	2022
	(million pounds)	(million pounds)
California	216.0	240.0
Michigan	656.0	1,100.0
New York	1,340.0	1,450.0
Oregon	155.5	175.0
Pennsylvania	557.0	460.0
Virginia	164.0	185.0
Washington	6,760.0	6,500.0
United States	9,848.5	10,110.0

Cranberry Production – States and United States: 2021 and Forecasted August 1, 2022

[A barrel weighs 100 lbs]

State	Total production	
	2021	2022
	(barrels)	(barrels)
Massachusetts	1,800,000	2,000,000
New Jersey	589,000	590,000
Oregon	520,000	550,000
Wisconsin	4,165,000	4,300,000
United States	7,074,000	7,440,000

Grape Production – States and United States: 2021 and Forecasted August 1, 2022

State	Total production	
	2021	2022
	(tons)	(tons)
California	5,755,000	5,600,000
Raisin [1]	1,070,000	1,000,000
Table [1]	1,050,000	1,100,000
Wine	3,635,000	3,500,000
Washington	295,000	385,000
Juice	115,000	155,000
Wine	180,000	230,000
United States	6,050,000	5,985,000

[1] Fresh basis.

Peach Production – States and United States: 2021 and Forecasted August 1, 2022

State	Total production	
	2021	2022
	(tons)	(tons)
California	505,000	430,000
Freestone	279,000	240,000
Clingstone	226,000	190,000
Colorado	11,500	12,500
Georgia	35,300	26,000
Michigan	8,400	12,000
New Jersey	13,700	7,500
Pennsylvania	19,800	12,000
South Carolina	87,400	76,000
Washington	7,670	7,500
United States	688,770	583,500

Pear Production – States and United States: 2021 and Forecasted August 1, 2022

State	Total production	
	2021	2022
	(tons)	(tons)
California	146,500	150,000
Oregon	259,000	240,000
Washington	296,000	300,000
United States	701,500	690,000

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	3,026	1,948	2,380
Corn for grain [1]	93,357	89,821	85,388	81,840
Corn for silage	(NA)		6,481	
Hay, all	(NA)	(NA)	50,736	51,507
Alfalfa	(NA)	(NA)	15,246	15,465
All other	(NA)	(NA)	35,490	36,042
Oats	2,550	2,392	650	796
Proso millet	725	670	662	
Rice	2,532	2,343	2,488	2,308
Rye	2,133	2,170	294	345
Sorghum for grain [1]	7,305	6,305	6,490	5,375
Sorghum for silage	(NA)		331	
Wheat, all	46,703	46,992	37,163	37,527
Winter	33,648	34,006	25,464	25,002
Durum	1,635	1,876	1,534	1,820
Other spring	11,420	11,110	10,165	10,705
Oilseeds				
Canola	2,152.0	1,958.0	2,089.0	1,913.0
Cottonseed	(X)	(X)	(X)	(X)
Flaxseed	325	235	268	216
Mustard seed	103.0	123.0	89.3	115.0
Peanuts	1,585.2	1,543.0	1,545.0	1,502.0
Rapeseed	14.3	9.0	12.5	8.2
Safflower	152.0	154.0	135.0	144.5
Soybeans for beans	87,195	88,025	86,332	87,211
Sunflower	1,288.5	1,667.0	1,243.8	1,602.2
Cotton, tobacco, and sugar crops				
Cotton, all	11,215.5	12,478.0	10,272.3	7,129.0
Upland	11,089.0	12,322.0	10,148.5	6,976.5
American Pima	126.5	156.0	123.8	152.5
Sugarbeets	1,160.0	1,178.4	1,107.6	1,146.1
Sugarcane	(NA)	(NA)	935.2	919.3
Tobacco	(NA)	(NA)	218.9	220.7
Dry beans, peas, and lentils				
Chickpeas	368.5	349.0	351.0	340.3
Dry edible beans	1,394.0	1,284.0	1,335.6	1,239.3
Dry edible peas	977.0	1,018.0	834.0	969.0
Lentils	708.0	648.0	549.0	606.0
Potatoes and miscellaneous				
Hops	(NA)	(NA)	60.9	60.0
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		44.0	
Potatoes	943.0	910.0	935.7	902.2
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	66.3	117,673	157,848
Corn for grain	bushels	177.0	175.4	15,115,170	14,358,679
Corn for silage	tons	20.1		130,317	
Hay, all	tons	2.37	2.27	120,196	116,759
Alfalfa	tons	3.23	3.17	49,245	49,100
All other	tons	2.00	1.88	70,951	67,659
Oats	bushels	61.3	66.1	39,836	52,576
Proso millet	bushels	23.2		15,376	
Rice [2]	cwt	7,709	7,627	191,796	176,026
Rye	bushels	33.4		9,808	
Sorghum for grain	bushels	69.0	53.2	447,810	286,120
Sorghum for silage	tons	15.4		5,083	
Wheat, all	bushels	44.3	47.5	1,645,764	1,782,898
Winter	bushels	50.2	47.9	1,277,365	1,197,650
Durum	bushels	24.3	40.4	37,259	73,558
Other spring	bushels	32.6	47.8	331,140	511,690
Oilseeds					
Canola	pounds	1,302		2,720,550	
Cottonseed	tons	(X)	(X)	5,323.0	3,813.0
Flaxseed	bushels	10.1		2,708	
Mustard seed	pounds	491		43,834	
Peanuts	pounds	4,135	4,129	6,389,300	6,201,600
Rapeseed	pounds	1,809		22,616	
Safflower	pounds	1,001		135,175	
Soybeans for beans	bushels	51.4	51.9	4,435,232	4,530,561
Sunflower	pounds	1,530		1,902,985	
Cotton, tobacco, and sugar crops					
Cotton, all [2]	bales	819	846	17,523.0	12,570.0
Upland [2]	bales	813	837	17,191.0	12,163.0
American Pima [2]	bales	1,287	1,281	332.0	407.0
Sugarbeets	tons	33.2	29.2	36,751	33,486
Sugarcane	tons	35.1	36.6	32,838	33,661
Tobacco	pounds	2,183	2,058	477,973	454,169
Dry beans, peas, and lentils					
Chickpeas [2]	cwt	815		2,861	
Dry edible beans [2]	cwt	1,701	1,979	22,721	24,525
Dry edible peas [2]	cwt	1,025		8,549	
Lentils [2]	cwt	606		3,327	
Potatoes and miscellaneous					
Hops	pounds	1,900	1,922	115,630.9	115,259.4
Maple syrup	gallons	(NA)	(NA)	3,721	5,028
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	1,224,590	788,340	963,160
Corn for grain [1]	37,780,640	36,349,660	34,555,670	33,119,830
Corn for silage	(NA)		2,622,800	
Hay, all [2]	(NA)	(NA)	20,532,350	20,844,370
Alfalfa	(NA)	(NA)	6,169,900	6,258,530
All other	(NA)	(NA)	14,362,450	14,585,840
Oats	1,031,960	968,020	263,050	322,130
Proso millet	293,400	271,140	267,900	
Rice	1,024,680	948,190	1,006,870	934,020
Rye	863,200	878,180	118,980	139,620
Sorghum for grain [1]	2,956,260	2,551,570	2,626,440	2,175,210
Sorghum for silage	(NA)		133,950	
Wheat, all [2]	18,900,240	19,017,190	15,039,490	15,186,800
Winter	13,617,010	13,761,890	10,305,030	10,118,060
Durum	661,670	759,200	620,790	736,540
Other spring	4,621,560	4,496,110	4,113,670	4,332,210
Oilseeds				
Canola	870,890	792,380	845,400	774,170
Cottonseed	(X)	(X)	(X)	(X)
Flaxseed	131,520	95,100	108,460	87,410
Mustard seed	41,680	49,780	36,140	46,540
Peanuts	641,510	624,440	625,250	607,840
Rapeseed	5,790	3,640	5,060	3,320
Safflower	61,510	62,320	54,630	58,480
Soybeans for beans	35,286,940	35,622,840	34,937,700	35,293,420
Sunflower	521,440	674,620	503,350	648,390
Cotton, tobacco, and sugar crops				
Cotton, all [2]	4,538,800	5,049,720	4,157,100	2,885,040
Upland	4,487,610	4,986,590	4,107,000	2,823,320
American Pima	51,190	63,130	50,100	61,720
Sugarbeets	469,440	476,890	448,230	463,820
Sugarcane	(NA)	(NA)	378,470	372,030
Tobacco	(NA)	(NA)	88,600	89,330
Dry beans, peas, and lentils				
Chickpeas	149,130	141,240	142,050	137,720
Dry edible beans	564,140	519,620	540,500	501,530
Dry edible peas	395,380	411,970	337,510	392,140
Lentils	286,520	262,240	222,170	245,240
Potatoes and miscellaneous				
Hops	(NA)	(NA)	24,630	24,270
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		17,810	
Potatoes	381,620	368,270	378,670	365,110
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	3.57	2,562,030	3,436,730
Corn for grain	11.11	11.01	383,943,000	364,727,250
Corn for silage	45.07		118,221,590	
Hay, all [2]	5.31	5.08	109,039,980	105,921,980
Alfalfa	7.24	7.12	44,674,310	44,542,770
All other	4.48	4.21	64,365,660	61,379,210
Oats	2.20	2.37	578,220	763,140
Proso millet	1.30		348,720	
Rice	8.64	8.55	8,699,720	7,984,410
Rye	2.09		249,130	
Sorghum for grain	4.33	3.34	11,374,900	7,267,780
Sorghum for silage	34.42		4,611,220	
Wheat, all [2]	2.98	3.20	44,790,360	48,522,530
Winter	3.37	3.22	34,764,180	32,594,690
Durum	1.63	2.72	1,014,020	2,001,920
Other spring	2.19	3.21	9,012,150	13,925,920
Oilseeds				
Canola	1.46		1,234,020	
Cottonseed	(X)	(X)	4,828,940	3,459,100
Flaxseed	0.63		68,790	
Mustard seed	0.55		19,880	
Peanuts	4.64	4.63	2,898,140	2,813,000
Rapeseed	2.03		10,260	
Safflower	1.12		61,310	
Soybeans for beans	3.45	3.49	120,707,230	123,301,660
Sunflower	1.71		863,180	
Cotton, tobacco, and sugar crops				
Cotton, all [2]	0.92	0.95	3,815,180	2,736,800
Upland	0.91	0.94	3,742,900	2,648,180
American Pima	1.44	1.44	72,280	88,610
Sugarbeets	74.38	65.50	33,339,950	30,377,990
Sugarcane	78.71	82.08	29,790,130	30,536,750
Tobacco	2.45	2.31	216,800	206,010
Dry beans, peas, and lentils				
Chickpeas	0.91		129,770	
Dry edible beans	1.91	2.22	1,030,610	1,112,440
Dry edible peas	1.15		387,780	
Lentils	0.68		150,910	
Potatoes and miscellaneous				
Hops	2.13	2.15	52,450	52,280
Maple syrup	(NA)	(NA)	18,610	25,140
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	370
Lemons ..... 1,000 tons	834	972
Oranges ..... 1,000 tons	4,388	3,811
Tangerines and mandarins ..... 1,000 tons	1,194	836
Noncitrus		
Apples, commercial ..... million pounds	9,848.5	10,110.0
Apricots ..... tons	41,740	36,200
Avocados ..... tons	150,740	
Blueberries, Cultivated ..... 1,000 pounds	669,100	
Blueberries, Wild (Maine) ..... 1,000 pounds	105,000	
Cherries, Sweet ..... tons	378,300	275,000
Cherries, Tart ..... million pounds	172.1	229.2
Coffee (Hawaii) ..... 1,000 pounds	28,440	
Cranberries ..... barrel	7,074,000	7,440,000
Dates ..... tons	59,450	
Grapes ..... tons	6,050,000	5,985,000
Kiwifruit (California) ..... tons	40,100	
Nectarines (California) ..... tons	116,500	
Olives (California) ..... tons	101,000	
Papayas (Hawaii) ..... 1,000 pounds	13,400	
Peaches ..... tons	688,770	583,500
Pears ..... tons	701,500	690,000
Plums (California) ..... tons	83,500	
Prunes (California) ..... tons	222,000	
Raspberries ..... 1,000 pounds	178,900	
Strawberries ..... 1,000 cwt	26,700.0	
Nuts and miscellaneous		
Almonds, shelled (California) ..... 1,000 pounds	2,915,000	2,600,000
Hazelnuts, in-shell (Oregon) ..... tons	77,500	
Macadamias (Hawaii) ..... 1,000 pounds	51,000	
Pecans, in-shell ..... 1,000 pounds	255,300	
Pistachios (California) ..... 1,000 pounds	1,155,000	
Walnuts, in-shell (California) ..... tons	725,000	

[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	335,660
Lemons	756,590	881,780
Oranges	3,980,730	3,457,280
Tangerines and mandarins	1,083,180	758,410
Noncitrus		
Apples, commercial	4,467,200	4,585,820
Apricots	37,870	32,840
Avocados	136,750	
Blueberries, Cultivated	303,500	
Blueberries, Wild (Maine)	47,630	
Cherries, Sweet	343,190	249,480
Cherries, Tart	78,060	103,960
Coffee (Hawaii)	12,900	
Cranberries	320,870	337,470
Dates	53,930	
Grapes	5,488,470	5,429,500
Kiwifruit (California)	36,380	
Nectarines (California)	105,690	
Olives (California)	91,630	
Papayas (Hawaii)	6,080	
Peaches	624,840	529,340
Pears	636,390	625,960
Plums (California)	75,750	
Prunes (California)	201,400	
Raspberries	81,150	
Strawberries	1,211,090	
Nuts and miscellaneous		
Almonds, shelled (California)	1,322,220	1,179,340
Hazelnuts, in-shell (Oregon)	70,310	
Macadamias (Hawaii)	23,130	
Pecans, in-shell	115,800	
Pistachios (California)	523,900	
Walnuts, in-shell (California)	657,710	

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

Winter Wheat for Grain Objective Yield Data

The National Agricultural Statistics Service is conducting objective yield surveys in 10 winter wheat-producing States during 2022. Randomly selected plots in winter wheat for grain fields are visited monthly from May through harvest to obtain specific counts and measurements. Data in these tables are based on counts from this survey.

Winter Wheat Objective Yield Percent of Samples Processed in the Lab – United States: 2018-2022

Year	June	July	August
	Mature [1]	Mature [1]	Mature [1]
	(percent)	(percent)	(percent)
2018	18	69	93
2019	8	50	89
2020	14	64	92
2021	7	64	97
2022	14	64	91

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

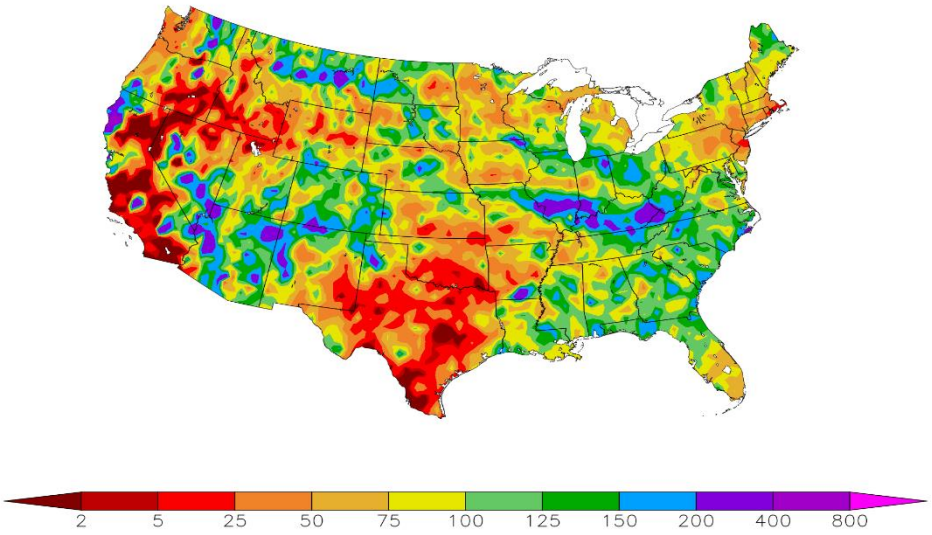
Winter Wheat Heads per Square Foot – Selected States: 2018-2022

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

State	2018	2019	2020	2021	2022 [1]
	(number)	(number)	(number)	(number)	(number)
Colorado					
July	40.6	49.3	43.0	49.9	40.8
August	41.0	50.8	42.7	46.8	39.7
Final	41.0	50.8	42.7	46.8	
Illinois					
July	60.9	48.1	52.5	63.3	63.1
August	60.9	49.2	52.4	63.4	62.9
Final	60.9	49.2	52.4	63.4	
Kansas					
July	37.3	46.9	45.3	51.4	40.7
August	37.3	47.2	45.4	51.4	40.7
Final	37.3	47.2	45.4	51.4	
Missouri					
July	53.7	56.4	52.5	55.4	55.5
August	53.7	56.4	52.5	55.4	55.5
Final	53.7	56.4	52.5	55.4	
Montana					
July	44.1	45.2	37.4	40.2	36.0
August	44.8	43.5	38.8	38.9	38.2
Final	44.7	43.1	38.6	38.9	
Nebraska					
July	50.5	53.1	45.8	47.7	45.1
August	50.4	53.7	45.7	47.0	45.4
Final	50.4	53.7	45.7	47.0	
Ohio					
July	70.3	52.0	64.1	66.7	55.1
August	70.3	53.0	63.9	66.5	55.0
Final	70.3	53.0	63.9	66.5	
Oklahoma					
July	32.9	38.1	38.2	38.2	35.2
August	32.4	38.1	38.3	38.2	35.3
Final	32.4	38.1	38.3	38.2	
Texas					
July	30.9	34.3	32.7	32.1	29.0
August	30.9	34.3	32.7	31.3	28.8
Final	31.1	34.5	32.7	31.3	
Washington					
July	41.8	34.2	37.7	33.3	40.3
August	42.3	34.3	38.3	33.4	41.0
Final	42.3	34.6	38.2	33.4	
10 State					
July	40.1	44.0	42.1	45.5	40.6
August	40.1	44.1	42.3	45.0	40.8
Final	40.2	44.2	42.3	45.0	

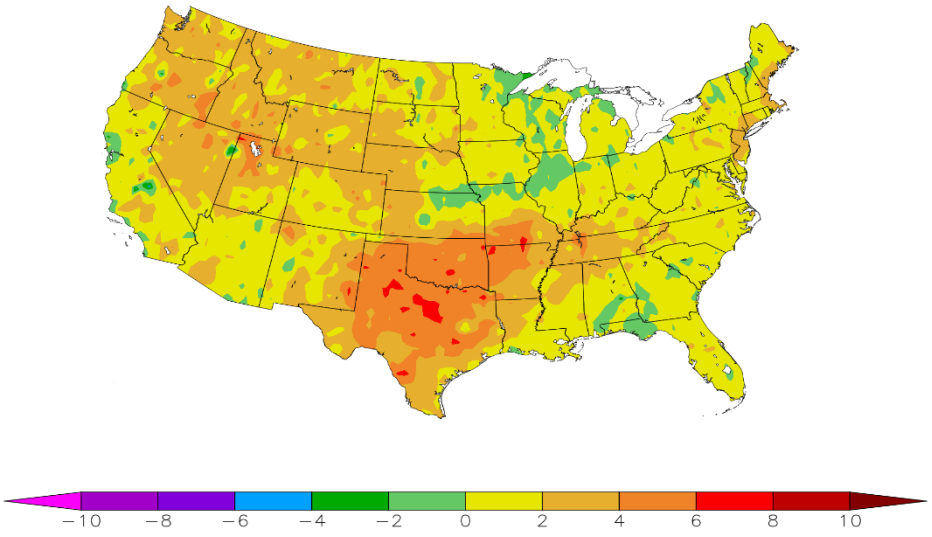
[1] Final head counts will be published in the *Small Grains 2022 Summary.*

Percent of Normal Precipitation (%)
7/1/2022 – 7/31/2022



NOAA Regional Climate Centers

Departure from Normal Temperature (F)
7/1/2022 – 7/31/2022



NOAA Regional Climate Centers

July Weather Summary

During July, rapidly intensifying drought gripped the central and southern Plains and mid-South, depleting topsoil moisture and significantly stressing rangeland, pastures, and various summer crops. Extreme heat—with monthly temperatures on the southern Plains locally averaging more than 5°F above normal—accompanied the lack of rain, further aggravating crop impacts. By July 31, rangeland and pastures were rated at least 45 percent very poor to poor in six Central States, led by Texas (91 percent), Arkansas (72 percent), and Nebraska (62 percent). In addition, more than one-third of the cotton was rated in very poor to poor condition at the end of July in Oklahoma (54 percent) and Texas (36 percent).

Several other areas, including the Northeast and portions of the Midwest, experienced mostly drier-than-normal July weather. However, much of the Corn Belt avoided heat stress as corn and soybeans entered reproduction. In fact, near- to slightly below-normal monthly temperatures were commonly observed in the Great Lakes States. In addition, soil moisture improved during July in parts of the eastern Corn Belt, following a warm, dry June. During the 3-week period ending July 31, almost two-thirds of the Nation's corn entered the silking stage of development, with an increase from 15 to 80 percent, while soybeans blooming increased from 32 to 79 percent.

Typical July dryness prevailed in the Northwest and along the Pacific Coast, allowing several large wildfires to flourish. By early August, wildfires had charred 5.8 million acres of vegetation, substantially above the national 10-year average of 3.7 million acres. California's largest wildfire of the season to date, the McKinney Fire, was ignited on July 29 and quickly burned through nearly 60,000 acres of timber, brush, and grass in Siskiyou County. In Mariposa County, California, near Yosemite National Park, the Oak Fire—which began on July 22—burned more than 19,000 acres of vegetation and destroyed nearly 200 structures. Near Salmon, Idaho, the Moose Fire—which also was sparked on July 22—scorched nearly 65,000 acres of vegetation by early August.

In contrast, the early-onset Southwestern monsoon circulation remained vigorously active during July. Although the Southwest was still mired in long-term drought, with profound water-supply concerns, surface conditions—including vegetation health—slowly improved. Other areas reporting wetter-than-normal July weather included much of Montana and an area broadly stretching from the lower Midwest into the Southeast. Unfortunately, late-month rainfall was excessively heavy in several areas, including the middle Mississippi Valley and the western slopes of the central Appalachians. In eastern Kentucky, the late-July deluge set crest records in the upper Kentucky River basin and resulted in at least three dozen fatalities.

With highly variable conditions across the country, there was little overall change in national drought coverage during July. During the 4-week period ending August 2, drought coverage in the Lower 48 States increased 2 percentage points, from 49.4 to 51.4 percent. August 2 also marked the 97th consecutive week with drought coverage topping 40 percent, a 21st century record, according to the *United States Drought Monitor*. Previously, the longest modern streak with drought coverage exceeding 40 percent had been 68 weeks, from June 19, 2012 – October 1, 2013.

By the end of July, tell-tale agricultural signs of elevated drought coverage included national numbers for rangeland and pastures rated in very poor to poor condition (49 percent) and topsoil moisture rated very short to short (45 percent). The only 21st-century year with lower-rated national rangeland and pastures at the end of July was 2012, when 57 percent were rated very poor to poor. Pasture and rangeland conditions were similarly low on July 30, 2006, when 48 percent were rated very poor to poor.

The tropical Atlantic Basin was remarkably quiet in July, with only minimal Tropical Storm Colin affecting the United States. However, Colin was a short-lived storm that—although technically a landfalling system over South Carolina—resulted in few wind- or rainfall-related impacts along the southern Atlantic Coast. The last time there were three or fewer named tropical cyclones in the Atlantic Basin by the end of July was 2019, when Tropical Storm Chantal formed on August 20. Despite that year's slow start to the Atlantic tropical season, the final tally for 2019 included 18 named storms.

July Agricultural Summary

July was warmer than average for most of the Nation. Much of the Southern Plains and parts of the Mississippi Valley recorded temperatures 4°F or more above normal for the month. Most of the Southern Plains and large parts of California, the Upper Midwest, Northeast, and Pacific Northwest remained drier than normal for the month. In contrast, large parts of the Corn Belt, Great Basin, Mid-Atlantic, Mississippi Valley, Northern Plains, Southeast, Southwest, and Rockies, received higher than normal amounts of rainfall. Late July downpours in Eastern Kentucky caused catastrophic flooding.

By July 3, seven percent of the Nation's corn acreage had reached the silking stage, 2 percentage points behind last year and 4 percentage points behind the 5-year average. By July 17, thirty-seven percent of the Nation's corn acreage had reached the silking stage, 15 percentage points behind last year and 11 percentage points behind the 5-year average. By July 17, six percent of the corn acreage was at or beyond the dough stage, 1 percentage point behind both last year and the 5-year average. By July 31, eighty percent of the Nation's corn acreage had reached the silking stage, 9 percentage points behind last year and 5 percentage points behind the 5-year average. By July 31, twenty-six percent of the corn acreage was at or beyond the dough stage, 9 percentage points behind last year and 5 percentage points behind the 5-year average. On July 31, sixty-one percent of the Nation's corn acreage was rated in good to excellent condition, 1 percentage point below the same time last year. In Iowa, 76 percent of the corn crop was rated in good to excellent condition.

Ninety-six percent of the Nation's soybean acreage had emerged by July 3, two percentage points behind last year but equal to the 5-year average. By July 3, sixteen percent of the Nation's soybean acreage had reached the blooming stage, 11 percentage points behind last year and 6 percentage points behind the 5-year average. By July 3, three percent of the Nation's soybean acreage had begun setting pods, equal to both last year and the 5-year average. By July 17, forty-eight percent of the Nation's soybean acreage had reached the blooming stage, 13 percentage points behind last year and 7 percentage points behind the 5-year average. By July 17, fourteen percent of the Nation's soybean acreage had begun setting pods, 7 percentage points behind last year and 5 percentage points behind the 5-year average. By July 31, seventy-nine percent of the Nation's soybean acreage had reached the blooming stage, 6 percentage points behind last year and 1 percentage point behind the 5-year average. By July 31, forty-four percent of the Nation's soybean acreage had begun setting pods, 12 percentage points behind last year and 7 percentage points behind the 5-year average. On July 31, sixty percent of the Nation's soybean acreage was rated in good to excellent condition, equal to the same time last year.

Fifty-four percent of the 2022 winter wheat acreage had been harvested by July 3, eleven percentage points ahead of last year and 6 percentage points ahead of the 5-year average. On July 3, thirty-one percent of the 2022 winter wheat crop was reported in good to excellent condition, 1 percentage point above the previous week but 16 percentage points below the same time last year. Seventy percent of the 2022 winter wheat acreage had been harvested by July 17, one percentage point behind both last year and the 5-year average. Eighty-two percent of the 2022 winter wheat acreage had been harvested by July 31, eight percentage points behind last year and 3 percentage points behind the 5-year average. Winter wheat harvest progress continued with advances of 10 percentage points or more reported in Colorado, Idaho, Michigan, Montana, Oregon, and South Dakota.

Forty-four percent of the Nation's cotton acreage had reached the squaring stage by July 3, two percentage points ahead of last year but equal to the 5-year average. By July 3, thirteen percent of the Nation's cotton acreage had begun setting bolls, 3 percentage points ahead of last year and 1 percentage point ahead of the 5-year average. Seventy-four percent of the Nation's cotton acreage had reached the squaring stage by July 17, seven percentage points ahead of last year and 4 percentage points ahead of the 5-year average. By July 17, thirty-one percent of the Nation's cotton acreage had begun setting bolls, 9 percentage points ahead of last year and 4 percentage points ahead of the 5-year average. Eighty-nine percent of the Nation's cotton acreage had reached the squaring stage by July 31, eight percentage points ahead of last year and 2 percentage points ahead of the 5-year average. By July 31, fifty-eight percent of the Nation's cotton acreage had begun setting bolls, 10 percentage points ahead of last year and 8 percentage points ahead of the 5-year average. On July 31, thirty-eight percent of the 2022 cotton acreage was rated in good to excellent condition, 22 percentage points below the same time last year.

Ninety-seven percent of the Nation's sorghum acreage was planted by July 3, equal to the previous year but 1 percentage point behind the 5-year average. By July 3, twenty-one percent of the Nation's sorghum acreage had reached the headed

stage, 1 percentage point behind last year and 2 percentage points behind the 5-year average. With progress limited to Texas, coloring advanced to 14 percent, 1 percentage point ahead of both last year and the 5-year average. By July 17, twenty-nine percent of the Nation's sorghum acreage had reached the headed stage, 3 percentage points behind last year and 2 percentage points behind the 5-year average. With progress limited to Texas, coloring advanced to 17 percent, equal to last year but 1 percentage point behind the 5-year average. By July 31, forty-three percent of the Nation's sorghum acreage had reached the headed stage, 12 percentage points behind last year and 8 percentage points behind the 5-year average. Twenty-one percent of the Nation's sorghum acreage was at or beyond the coloring stage by July 31, one percentage point behind last year and 2 percentage points behind the 5-year average. Twenty-eight percent of the Nation's sorghum acreage was rated in good to excellent condition on July 31, thirty-four percentage points below the same time last year.

By July 3, fifteen percent of the Nation's rice acreage had reached the headed stage, 2 percentage points ahead of the previous year but equal to the 5-year average. By July 17, twenty-eight percent of the Nation's rice acreage had reached the headed stage, 1 percentage point behind the previous year and 3 percentage points behind the 5-year average. By July 31, fifty-four percent of the Nation's rice acreage had reached the headed stage, 3 percentage points behind the previous year and 5 percentage points behind the 5-year average. On July 31, seventy-three percent of the Nation's rice acreage was rated in good to excellent condition, 1 percentage point above the same time last year.

Sixty-seven percent of the Nation's oat acreage had headed by July 3, nineteen percentage points behind last year and 14 percentage points behind the 5-year average. Eighty-eight percent of the Nation's oat acreage had headed by July 17, nine percentage points behind last year and 7 percentage points behind the 5-year average. Twelve percent of the Nation's oat acreage had been harvested by July 17, five percentage points behind last year and four percentage points behind the 5-year average. Harvest was complete in Texas. Ninety-eight percent of the Nation's oat acreage had headed by July 31, two percentage points behind both last year and the 5-year average. Thirty-three percent of the Nation's oat acreage had been harvested by July 31, thirteen percentage points behind last year and 6 percentage points behind the 5-year average. Oat harvest progress continued with advances of 20 percentage points or more reported in Iowa, Nebraska, and South Dakota. On July 31, fifty-five percent of the Nation's oat acreage was rated in good to excellent condition, 19 percentage points above the same time last year.

Forty-three percent of the Nation's barley acreage had reached the headed stage by July 3, fourteen percentage points behind last year and 10 percentage points behind the 5-year average. Seventy-nine percent of the Nation's barley acreage had reached the headed stage by July 17, nine percentage points behind last year and 8 percentage points behind the 5-year average. Ninety-eight percent of the Nation's barley acreage had reached the headed stage by July 31, equal to both last year and the 5-year average. By July 31, barley producers had harvested 6 percent of the Nation's barley crop, 5 percentage points behind last year but equal to the 5-year average. On July 31, fifty-five percent of the Nation's barley acreage was rated in good to excellent condition, 34 percentage points above the same time last year.

By July 3, twenty percent of the Nation's spring wheat crop had reached the headed stage, 46 percentage points behind the previous year and 37 percentage points behind the 5-year average. By July 17, sixty-eight percent of the Nation's spring wheat crop had reached the headed stage, 23 percentage points behind the previous year and 22 percentage points behind the 5-year average. By July 31, ninety-seven percent of the Nation's spring wheat crop had reached the headed stage, 2 percentage points behind both the previous year and the 5-year average. On July 31, seventy percent of the Nation's spring wheat was rated in good to excellent condition, 60 percentage points above the same time last year.

By July 3, forty-nine percent of the Nation's peanut crop had reached the pegging stage, 3 percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. By July 17, seventy-five percent of the Nation's peanut crop had reached the pegging stage, 3 percentage points ahead of both the previous year and the 5-year average. By July 31, eighty-nine percent of the Nation's peanut crop had reached the pegging stage, 2 percentage points ahead of both the previous year and the 5-year average. On July 31, seventy-one percent of the Nation's peanut acreage was rated in good to excellent condition, 2 percentage points below the same time last year.

Ninety-seven percent of the Nation's intended 2022 sunflower acreage was planted by July 3, one percentage point behind last year but equal to the 5-year average.

Crop Comments

Corn: The 2021 corn planted area is estimated at 89.8 million acres, down less than 1 percent from the June estimate and down 4 percent from 2021. Area harvested for grain is forecast at 81.8 million acres, down less than 1 percent from the previous forecast and down 4 percent from last year.

At 14.4 billion bushels, 2022 corn production for grain is forecast to be the fourth highest production on record for the United States. The forecasted yield, at 175.4 bushels per acre, is down 1 percent from last year's final estimate of a record high 177.0 bushels per acre. Record high yields are forecast in California, Iowa, Washington, and Wisconsin.

By April 3, producers had planted 2 percent of the Nation's corn crop, equal to both last year and the 5-year average. By April 10, producers had planted 2 percent of the Nation's corn crop, 2 percentage points behind last year and 1 percentage point behind the 5-year average. By April 24, producers had planted 7 percent of the Nation's corn, 9 percentage points behind last year and 8 percentage points behind the 5-year average. Two percent of the Nation's corn had emerged by April 24, one percentage point behind both the previous year and the 5-year average.

By May 1, producers had planted 14 percent of the Nation's corn, 28 percentage points behind last year and 19 percentage points behind the 5-year average. Three percent of the Nation's corn acreage had emerged by May 1, four percentage points behind the previous year and 3 percentage points behind the 5-year average. By May 15, producers had planted 49 percent of the Nation's corn crop, 29 percentage points behind last year and 18 percentage points behind the 5-year average. Fourteen percent of the Nation's corn acreage had emerged by May 15, twenty-four percentage points behind the previous year and 18 percentage points behind the 5-year average. By May 29, producers had planted 86 percent of the Nation's corn crop, 8 percentage points behind last year and 1 percentage point behind the 5-year average. Sixty-one percent of the Nation's corn acreage had emerged by May 29, eighteen percentage points behind the previous year and 7 percentage points behind the 5-year average.

By June 5, producers had planted 94 percent of the Nation's corn, 4 percentage points behind last year but 2 percentage points ahead of the 5-year average. Seventy-eight percent of the Nation's corn acreage had emerged by June 5, eleven percentage points behind the previous year and 3 percentage points behind the 5-year average. By June 12, producers had planted 97 percent of the Nation's corn, 3 percentage points behind last year but equal to the 5-year average. Eighty-eight percent of the Nation's corn acreage had emerged by June 12, seven percentage points behind the previous year and 1 percentage point behind the 5-year average. Ninety-five percent of the Nation's corn acreage had emerged by June 19, four percentage points behind the previous year but equal to the 5-year average. By June 26, four percent of the Nation's corn acreage had reached the silking stage, equal to both last year and the 5-year average. On June 26, sixty-seven percent of the Nation's corn was rated in good to excellent condition, 3 percentage points above the same time last year.

By July 3, seven percent of the Nation's corn acreage had reached the silking stage, 2 percentage points behind last year and 4 percentage points behind the 5-year average. By July 17, thirty-seven percent of the Nation's corn acreage had reached the silking stage, 15 percentage points behind last year and 11 percentage points behind the 5-year average. By July 17, six percent of the corn acreage was at or beyond the dough stage, 1 percentage point behind both last year and the 5-year average. By July 31, eighty percent of the Nation's corn acreage had reached the silking stage, 9 percentage points behind last year and 5 percentage points behind the 5-year average. By July 31, twenty-six percent of the corn acreage was at or beyond the dough stage, 9 percentage points behind last year and 5 percentage points behind the 5-year average. On July 31, sixty-one percent of the Nation's corn acreage was rated in good to excellent condition, 1 percentage point below the same time last year.

Sorghum: Production is forecast at 286 million bushels, down 36 percent from last year. Area harvested for grain is forecast at 5.38 million acres, unchanged from the previous forecast but down 17 percent from 2021. Based on August 1 conditions, yield is forecast at 53.2 bushels per acre, 15.8 bushels below the 2021 yield of 69.0 bushels per acre.

As of July 31, forty-three percent of the sorghum acreage was headed, 12 percentage points behind last year and 8 percentage points behind the 5-year average. Twenty-one percent of the acreage was coloring at that time, 1 percentage

point behind last year and 2 percentage points behind the 5-year average. On July 31, twenty-eight percent of the acreage was rated in good to excellent condition, compared with 62 percent at the same time last year.

Oats: Production is forecast at 52.6 million bushels, up 32 percent from 2021. Growers expect to harvest 796,000 acres for grain, unchanged from the previous forecast but up 22 percent from 2021. Based on conditions as of August 1, the United States yield is forecast at 66.1 bushels per acre, unchanged from the previous forecast but 4.8 bushels above the 2021 average yield. Record high yields are expected in Illinois and North Dakota.

As of July 31, thirty-three percent of the Nation's oat acreage was harvested, 13 percentage points behind last year and 6 percentage points behind the 5-year average. As of July 31, fifty-five percent of the Nation's oat acreage was rated in good to excellent condition, compared with 36 percent at the same time last year.

Barley: Production is forecast at 158 million bushels, up 34 percent from 2021. Based on conditions as of August 1, the average yield for the United States is forecast at 66.3 bushels per acre, up 5.9 bushels from last year. Area harvested for grain or seed, at 2.38 million acres is down 1 percent from the *Acreage* report released on June 30, 2022, but up 22 percent from 2021.

Ninety-eight percent of the Nation's barley acreage was at or beyond the heading stage by July 31, on pace with last year and the 5-year average. By July 31, six percent of the Nation's barley acreage was harvested, 5 percentage points behind last year, but on pace with the 5-year average. Overall, fifty-five percent of the barley acreage was reported in good to excellent condition on July 31, thirty-four percentage points higher than the same time last year.

Winter wheat: Production is forecast at 1.20 billion bushels, down less than 1 percent from the previous forecast and down 6 percent from 2021. Based on August 1 conditions, the United States yield is forecast at 47.9 bushels per acre, down 0.1 bushel from last month and down 2.3 bushels from last year's average yield of 50.2 bushels per acre. Area expected to be harvested for grain or seed totals 25.0 million acres, unchanged from the *Acreage* report released on June 30, 2022, but down 2 percent from last year. Record high yields are forecast in Illinois and North Dakota for 2022.

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 levels in all six States. As of July 31, thirty-two percent of the acreage was harvested in Montana, two percentage points behind the 5-year average. In South Dakota, seventy-seven percent of the acreage was harvested, three percentage points ahead of the 5-year pace. Harvest progress was complete or nearly complete in California, Colorado, Kansas, Nebraska, Oklahoma, and Texas.

Forecasted head counts from the objective yield survey in the three Soft Red Winter States (Illinois, Missouri, and Ohio) are above last year's levels in Missouri, but below last year's levels in Illinois and Ohio. As of July 31, harvest progress in Michigan was at 85 percent, two percentage points ahead of the 5-year average pace. Harvest progress in the Soft Red Winter (SRW) growing area was complete or nearly complete in Arkansas, Illinois, Indiana, Missouri, North Carolina, and Ohio.

Forecasted head counts from the objective yield survey in Washington are above last year. As of July 31, harvest progress was at 14 percent in Idaho, 36 percent in Oregon, and 10 percent in Washington, behind the average of each State at 11 percent, 21 percent, and 29 percent, respectively.

Durum wheat: Production is forecast at 73.6 million bushels, down 5 percent from the previous estimate, up 97 percent from 2021. The United States yield is forecast at 40.4 bushels per acre, up 0.1 bushel from the previous estimate and up 16.0 bushels from last year. Area expected to be harvested for grain or seed totals 1.82 million acres, down 5 percent from the *Acreage* report released on June 30, 2022, but up 19 percent from 2021. A record high yield is forecast in California.

Montana and North Dakota are the two largest Durum-producing States. As of July 31, fifty-one percent of the acreage in Montana and 84 percent of the acreage in North Dakota were rated in good to excellent condition. As of July 31, Montana Durum wheat progress was 39 percent turning color, ten percentage points behind average. In North Dakota, Durum wheat turning color progress was rated at 17 percent as of July 31, forty-four percentage points behind average.

Other spring wheat: Production is forecast at 512 million bushels, up 2 percent from the previous forecast and up 55 percent from 2021. The United States yield is forecast at 47.8 bushels per acre, up 0.8 bushel from the previous forecast and up 15.2 bushels from a year ago. Of the total production, 463 million bushels are Hard Red Spring wheat, up 56 percent from last year. The area expected to be harvested for grain or seed is expected to total 10.7 million acres, unchanged from the *Acreage* report released on June 30, 2022, but 5 percent above 2021. A record high yield is forecast in North Dakota.

As of July 31, seventy percent of the other spring wheat acreage was rated in good to excellent condition, compared to 11 percent in 2021.

Rice: Production is forecast at 176,026 million cwt, down 8 percent from 2021. Area for harvest is expected to total 2.31 million acres, unchanged from the *Acreage* report but down 7 percent from last year. Based on August 1 conditions, yields are expected to average 7,627 pounds per acre, down 82 pounds per acre from last year.

As of July 31, fifty-four percent of the Nation's rice acreage had reached the headed stage, 3 percentage points behind the previous year and 5 percentage points behind the 5-year average. Seventy-three percent of the rice acreage was rated in good to excellent condition, 2 percentage points below the previous week but 1 percentage point above the same time last year.

Alfalfa and alfalfa mixtures: Production of alfalfa and alfalfa mixture dry hay for 2022 is forecast at 49.1 million tons, down less than 1 percent from 2021. Based on August 1 conditions, yields are expected to average 3.17 tons per acre, down 0.06 ton from last year. Harvested area is forecast at 15.5 million acres, unchanged from the *Acreage* report, but up 1 percent from 2021. Record high yields are forecast in Idaho and Wyoming.

Other hay: Production of other hay is forecast at 67.7 million tons, down 5 percent from 2021. Based on August 1 conditions, the United States yield is expected to average 1.88 tons per acre, down 0.12 ton from last year. Harvested area is forecast at 36.0 million acres, unchanged from the *Acreage* report, but up 2 percent from 2021. Record high yields are expected in California.

Soybeans: Production is forecast at a record high 4.53 billion bushels, up 2 percent from last year. Based on conditions as of August 1, yields are expected to average a record high 51.9 bushels per acre, up 0.5 bushel from last year. Total planted area, at 88.0 million acres, is down less than 1 percent from the previous estimate but up 1 percent from the previous year. Area harvested for beans in the United States is forecast at 87.2 million acres, down less than 1 percent from the previous forecast but up 1 percent from 2021.

Planting was underway by the start of May in 16 of the 18 major soybean-producing States. Wet weather delayed planting in Minnesota until the week ending May 8 and in North Dakota until the week ending May 15. Eight percent of the acreage was planted by May 1, fourteen percentage points behind last year and 5 percentage points behind the 5-year average. Sixty-six percent of soybean acreage was planted by May 29, one percentage point behind the 5-year average.

Nationally, 70 percent of soybean acreage was emerged by June 12, fifteen percentage points behind last year and 4 percentage points behind the 5-year average. Soybean emergence was ahead of the 5-year average in 12 of the 18 major soybean-producing States, but Minnesota, North Dakota, and South Dakota were more than 10 percentage points behind the 5-year average. By contrast, Illinois and North Carolina were 10 percentage points ahead of the 5-year average as of June 12. By July 3, sixteen percent of soybean acreage was blooming, 11 percentage points behind last year and 6 percentage points behind the 5-year average.

Thirty-two percent of soybean acreage was blooming by July 10, twelve percentage points behind last year and 6 percentage points behind the 5-year average. By July 10, six percent of the soybean acreage was setting pods, 3 percentage points behind last year and the 5-year average. Fourteen percent of soybean acres were setting pods by July 17, seven percentage points behind last year and 5 percentage points behind the 5-year average. The week ending July 17 was the first week this year that soybeans were setting pods in all 18 major soybean-producing States. By July 24, sixty-four percent of soybean acreage was blooming, 10 percentage points behind last year and 5 percentage points behind

the 5-year average. Forty-four percent of the soybean acreage was setting pods by July 31, twelve percentage points behind last year and 7 percentage points behind the 5-year average.

As of July 31, sixty percent of soybean acreage was rated in good to excellent condition, equal to the percent rated in good to excellent condition at the same time last year. Soybean acreage was rated in worse condition this year than last year in 12 of the 18 major soybean-producing States but Minnesota, North Dakota, and South Dakota increased more than 30 percentage points compared to last year.

If realized, the forecasted yield with be a record high in Arkansas, Illinois, Indiana, Maryland, Mississippi, Ohio, and Virginia.

Peanuts: Production is forecast at 6.20 million acres in 2022, down 3 percent from 2021. Area harvested is expected to total 1.50 million acres, unchanged from the *Acreage* report but down 3 percent from last year. Based on conditions as of August 1, the average yield for the United States is forecast at 4,129 pounds per acre, down less than 1 percent from 2021. Record high yields are forecast in Alabama, Florida, South Carolina, and Virginia.

As of July 31, eighty-nine percent of the Nation's peanut crop had reached the pegging stage, 2 percentage points ahead of both the previous year and the 5-year average. Seventy-one percent of the peanut acreage was rated in good to excellent condition, 1 percentage point above the previous week but 2 percentage points below the same time last year.

Cotton: Area planted to Upland cotton is estimated at 12.3 million acres, unchanged from the June estimate but up 11 percent from 2021. Upland cotton harvested area for the Nation is expected to total 6.98 million acres, down 31 percent from last year. Pima cotton planted area is estimated at 156,000 acres, up 23 percent from 2021. Expected Pima cotton harvested area, at 152,500 acres, is up 23 percent from last year. If realized, Upland cotton harvested area for Texas will be the lowest on record.

As of July 31, eighty-nine percent of the cotton acreage was squaring, 8 percentage points ahead of last year and 2 percentage points ahead of the 5-year average. At that time, 58 percent of the cotton acreage was setting bolls, 10 percentage points ahead of last year and 8 percentage points ahead of the 5-year average. As of July 31, thirty-eight percent of the cotton acreage was rated in good to excellent condition, compared with 60 percent at the same time last year.

In Texas, cotton setting bolls reached 51 percent, up 10 percentage points from the previous year and 2 percentage points from the 5-year average. Texas cotton producers in the Southern Plains and the Northern Low Plains have reported inadequate rain along with excessive heat; with this, some cotton fields are starting to bloom while others are struggling to keep up with moisture needs of the crop. In Georgia, cotton fields began to near completion on squaring and continued to set bolls. Target Spot in cotton was reported to be quite prevalent in rank fields. As of July 31, twenty-five percent of the cotton acreage in Texas and sixty-seven percent of the cotton acreage in Georgia was rated in good to excellent condition.

Dry beans: Production of dry edible beans is forecast at 24.5 million cwt, up 8 percent from 2021. Area planted is estimated at 1.28 million acres, up slightly from the *Acreage* report but down 8 percent from 2021. Area harvested is forecast at 1.24 million acres, up slightly from the *Acreage* report but down 7 percent from 2021. The yield is forecast at 1,979 pounds per acre, an increase of 278 pounds from last season. In North Dakota, the largest producing State, harvest is lagging well behind last year and the average, however, expected yields are up significantly from last year.

Sugarbeets: Production of sugarbeets for the 2022 crop year is forecast at 33.5 million tons, down 9 percent from last year. Producers expect to harvest 1.15 million acres up 3 percent from last year. Yield is forecast at 29.2 tons per acre, down 4.0 tons from last year.

Sugarcane: Production of sugarcane for sugar and seed is forecast at 33.7 million tons, up 3 percent from 2021. Producers intend to harvest 919,300 acres for sugar and seed during the 2022 crop year, down 2 percent from 2021. Yields for sugar and seed are expected to average 36.6 tons per acre, up 1.5 tons from 2021.

Tobacco: The 2022 United States all tobacco production is forecast at 454 million pounds, down 5 percent from 2021. Area harvested, at 220,730 acres, is down slightly from the *Acreage* report but up 1 percent from last year. Yield for the 2022 crop year is forecast at 2,058 pounds per acre, 125 pounds below last year.

Hops: Production of hops is forecast at 115 million pounds, down slightly from last year. Area harvested is forecast at 59,970 acres, up slightly from June but down 1 percent from 2021. Yield is forecast at 1,922 pounds per acre, 22 pounds higher than the 2021 yield. If realized this will be the second highest production and acreage on record behind 2021.

Apples, commercial: United States apple total production for the 2022 crop year is forecast at 10.1 billion pounds, up 3 percent from the previous year. In Washington, the largest growing State, a wet, windy and colder than usual spring impacted the 2022 crop with production expected to be down 4 percent from last year's already lower than usual crop. In New York, growers are expecting near record yields after a moderate winter followed by ideal growing conditions. In Michigan, production is expected to be up 68 percent following last year's crop that was damaged by frost. Many varieties are expected to be harvested ahead of schedule and growers are anticipating some of the best yields since 2016.

Cranberries: United States cranberry total production for the 2022 season is forecast at 7.44 million barrels, up 5 percent from the 2021 crop year. In Wisconsin, the largest growing State, production is forecast at 4.30 million barrels, up 3 percent from last year. Production in Massachusetts, forecast at 2.00 million barrels, is up 11 percent from last year. Early in the growing season, Wisconsin and Massachusetts growers reported the crop experienced cold, wet weather, and hail. The planting season started the first of week of June but was delayed due to rainy days. Warmer temperatures and better weather conditions helped cranberry plants and berries to develop. Cranberries continue to increase in size, as growers monitor fruit quality.

Grapes: United States grape production for 2022 is forecast at 5.99 million tons, down 1 percent from last year. In California, the largest growing State, wine type grape production is forecast at 3.50 million tons, down 4 percent from last season, and represents 62 percent of California's total grape crop. California's raisin type grape production is forecast at 1.00 million tons, down 7 percent from last year, and represents 18 percent of California's total grape crop. California's table type grape production is forecast at 1.10 million tons, up 5 percent from last year and represents the remaining 20 percent of California's total grape crop. Grape vineyards were hit by drought conditions throughout California. Growers across the state struggled with labor costs and availability, as well as water availability. Vineyards in San Joaquin County reported frost damage that was significant enough to impact yields.

Peaches: United States peach total production for the 2022 season is forecast at 583,500 tons, is down 15 percent from 2021. In California, the largest growing State, production is forecast at 430,000 tons, is down 2 percent from the previous forecast and down 15 percent from 2021. California Freestone production is forecast at 240,000 tons, down 4 percent from the previous forecast and down 14 percent from 2021. A freeze in February impacted the crop. Harvest of peaches is ongoing. California Clingstone production is forecast at 190,000 tons, unchanged from the previous forecast and down 16 percent from 2021. Full bloom occurred on March 6. Chilling hours in the northern and central areas of the State increased from the previous season. Freeze events occurred in February and April which impacted the crop. South Carolina production is forecast at 76,000 tons, down 13 percent from the previous season. Peach production was impacted by a mid-March freeze. Harvest began in mid-May and as of week-ending August 1, harvest was 85 percent complete. Georgia production, forecast at 26,000 tons, is down 26 percent from the previous season. A mid-March freeze impacted the crop. As of week-ending August 1, harvest was 93 percent complete.

Pears: United States pear total production for 2022 is forecast at 690,000 tons, down 2 percent from last year. In Washington, the largest growing State, the crop experienced snow in mid-April and cold, wet weather in May however, growers expect those conditions had minimal impact on this season crop's yield. In Oregon, the pear crop fared well in spite of an April cold snap and rainy weather throughout the spring. In California, the pear crop has had late harvest in recent years, however, the 2022 crop is back to its normal timing. Growing conditions have been optimal this year, with expectations of having a high-quality crop.

Statistical Methodology

Survey procedures: Objective yield and farm operator surveys were conducted between July 25 and August 8 to gather information on expected yields as of August 1. The objective yield survey for winter wheat was conducted in 10 States that account for 71 percent of the 2021 winter wheat production. The objective yield survey for cotton was only conducted in the southern portions of Texas. Farm operators selected for the objective yield survey were interviewed to update previously reported acreage data and seek permission to randomly locate two sample plots in selected fields for the objective yield survey. The counts made within each sample plot depend on the crop and the maturity of that crop. In all cases, the number of plants is recorded along with other measurements that provide information to forecast the number heads or bolls and their weight. 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 fruit are harvested and weighed. After the farm operator has harvested the sample field, another plot is sampled to obtain current year harvesting loss. Starting in 2019, NASS eliminated the August objective yield survey for cotton (except Texas), corn, and soybeans. The first objective yield survey conducted for these crops will begin in September.

The farm operator survey was conducted primarily by telephone with some use of mail, internet, and personal interviews. Approximately 15,400 producers were interviewed during the survey period and asked questions about probable yield. These growers will continue to be surveyed throughout the growing season to provide indications of average yields.

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 with 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 August 1 forecasts.

Revision policy: The August 1 production forecast will not be revised; instead, a new forecast will be made each month throughout the growing season. End-of-season estimates are made after harvest. At the end of the 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. Estimates of planted acres for spring planted crops are subject to revision in the August *Crop Production* report if conditions altered the planting intentions since the mid-year survey. Planted acres may also be revised for cotton, peanuts, and rice in the September *Crop Production* report each year; spring wheat, Durum wheat, barley, and oats only in the *Small Grains Annual* report at the end of September; and all other spring planted crops in the October *Crop Production* report. Revisions to planted acres will only be made when either special survey data, administrative data, such as Farm Service Agency program “sign up” data, or remote sensing data are available. Harvested acres may be revised any time a production forecast is made if there is strong evidence that the intended harvested area has changed since the last forecast.

Reliability: To assist users in evaluating the reliability of the August 1 production forecast, the “Root Mean Square Error," a statistical measure based on past performance, is computed. The deviation between the August 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. For example, the "Root Mean Square Error" for the August 1 corn for grain production forecast is 3.9 percent. This means that chances are 2 out of 3 that the current production forecast will not be above or below the final estimate by more than 3.9 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 6.8 percent.

Also, shown in the following table is a 20-year record for selected crops of the differences between the August 1 forecast and the final estimate. Using corn again as an example, changes between the August 1 forecast and the final estimate during the last 20 years have averaged 359 million bushels, ranging from 5 million bushels to 1.17 billion bushels. The August 1 forecast has been below the final estimate 9 times and above 11 times. This does not imply that the August 1 corn forecast this year is likely to understate or overstate final production.

Reliability of August 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)
Barley ..... bushels	6.1	10.5	10	(Z)	25	8	12
Corn for grain ..... bushels	3.9	6.8	359	5	1,167	9	11
Hay							
Alfalfa .....tons	4.1	7.2	2	(Z)	5	3	17
Other .....tons	3.0	5.1	2	(Z)	4	6	14
Oats ..... bushels	11.6	20.1	8	(Z)	27	3	17
Peanuts .....pounds	9.3	16.0	338	32	1,461	11	9
Rice ..... cwt	4.7	8.2	8	1	20	9	11
Sorghum for grain ..... bushels	6.6	11.4	20	(Z)	66	11	9
Soybeans for beans ..... bushels	6.3	10.8	156	6	408	14	6
Sugarbeets .....tons	6.9	12.0	2	(Z)	6	12	8
Sugarcane .....tons	6.8	11.8	2	(Z)	4	10	10
Upland cotton [1] .....bales	9.2	15.8	1,279	195	3,464	8	12
Wheat							
Winter wheat ..... bushels	2.1	3.7	23	(Z)	71	6	14
Durum wheat ..... bushels	8.7	15.0	5	(Z)	12	11	9
Other spring ..... bushels	7.0	12.2	30	3	69	10	10

(Z) Less than half of the unit shown.

[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
- Deonne Holiday – Almonds, Asparagus, Carrots, Coffee, Cranberries, 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, 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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- 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.