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Special Note

At the request of the hop industry, the hop acres strung for harvest estimate by variety is now included on pages 7 and 8 of this report. This estimate was previously published in the *Acreage* report later in June.

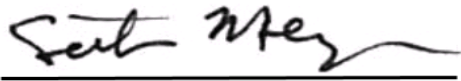
Winter Wheat Production Up 2 Percent from May Forecast Orange Production Up 1 Percent

Winter wheat production is forecast at 1.31 billion bushels, up 2 percent from the May 1 forecast and up 12 percent from 2020. As of June 1, the United States yield is forecast at 53.2 bushels per acre, up 1.1 bushels from last month and up 2.3 bushels from last year's average yield of 50.9 bushels per acre.

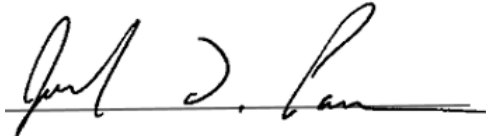
Hard Red Winter production, at 771 million bushels, is up 6 percent from last month. Soft Red Winter, at 335 million bushels, is up 1 percent from the May forecast. White Winter, at 202 million bushels, is down 8 percent from last month. Of the White Winter production, 15.4 million bushels are Hard White and 187 million bushels are Soft White.

The United States all orange forecast for the 2020-2021 season is 4.50 million tons, up 1 percent the previous forecast but down 14 percent from the 2019-2020 final utilization. The Florida all orange forecast, at 52.7 million boxes (2.37 million tons), is up 2 percent from the previous forecast but down 22 percent from last season's final utilization. In Florida, early, midseason, and Navel varieties are forecast at 22.7 million boxes (1.02 million tons), unchanged from the previous forecast but down 23 percent from last season's final utilization. The Florida Valencia orange forecast, at 30.0 million boxes (1.35 million tons), is up 3 percent from the previous forecast but down 21 percent from last season's final utilization. California and Texas orange production forecasts were carried forward from the previous forecast.

This report was approved on June 10, 2021.



Secretary of Agriculture
Designate
Seth Meyer



Agricultural Statistics Board
Chairperson
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Winter Wheat Area Harvested, Yield, and Production – States and United States: 2020 and Forecasted June 1, 2021

State	Area harvested		Yield per acre			Production	
	2020	2021	2020	2021		2020	2021
				May 1	June 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arkansas	75	120	55.0	50.0	51.0	4,125	6,120
California	80	70	75.0	75.0	77.0	6,000	5,390
Colorado	1,520	1,700	27.0	34.0	39.0	41,040	66,300
Idaho	660	680	101.0	95.0	87.0	66,660	59,160
Illinois	520	650	68.0	74.0	75.0	35,360	48,750
Indiana	250	300	70.0	74.0	76.0	17,500	22,800
Kansas	6,250	6,900	45.0	48.0	52.0	281,250	358,800
Kentucky	340	365	63.0	75.0	77.0	21,420	28,105
Maryland	150	155	73.0	73.0	72.0	10,950	11,160
Michigan	450	520	75.0	82.0	80.0	33,750	41,600
Mississippi	20	60	48.0	52.0	52.0	960	3,120
Missouri	370	480	62.0	68.0	70.0	22,940	33,600
Montana	1,490	1,650	51.0	49.0	51.0	75,990	84,150
Nebraska	830	780	41.0	47.0	51.0	34,030	39,780
North Carolina	350	360	60.0	53.0	52.0	21,000	18,720
North Dakota	33	55	49.0	40.0	42.0	1,617	2,310
Ohio	490	530	71.0	75.0	78.0	34,790	41,340
Oklahoma	2,600	2,700	40.0	40.0	39.0	104,000	105,300
Oregon	725	705	64.0	56.0	50.0	46,400	35,250
South Dakota	600	630	58.0	54.0	55.0	34,800	34,650
Tennessee	230	320	59.0	70.0	69.0	13,570	22,080
Texas	2,050	1,900	30.0	32.0	34.0	61,500	64,600
Virginia	130	130	60.0	62.0	60.0	7,800	7,800
Washington	1,750	1,690	76.0	64.0	57.0	133,000	96,330
Wisconsin	125	220	69.0	70.0	71.0	8,625	15,620
Other States ¹	936	942	55.5	59.3	59.6	51,945	56,165
United States	23,024	24,612	50.9	52.1	53.2	1,171,022	1,309,000

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 2021 Summary*.

Durum Wheat Area Harvested, Yield, and Production – States and United States: 2020 and Forecasted June 1, 2021

[Area harvested for the United States and remaining States will be published in the *Acreage* report released June 2021. Yield and production will be published in the *Crop Production* report released July 2021. Blank data cells indicate estimation period has not yet begun]

State	Area harvested		Yield per acre			Production	
	2020	2021	2020	2021		2020	2021
				May 1	June 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arizona	43	44	99.0	100.0	102.0	4,257	4,488
California	20	20	87.0	91.0	92.0	1,740	1,840
Idaho	9		89.0			801	
Montana	685		39.0			26,715	
North Dakota	905		39.0			35,295	
United States	1,662		41.4			68,808	

Wheat Production by Class – United States: 2020 and Forecasted June 1, 2021

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

Crop	2020	2021
	(1,000 bushels)	(1,000 bushels)
Winter		
Hard red	658,640	771,467
Soft red	266,235	335,451
Hard white	12,179	15,399
Soft white	233,968	186,683
Spring		
Hard red	530,152	
Hard white	10,687	
Soft white	45,151	
Durum	68,808	
Total	1,825,820	

Hops Area Harvested by Variety – States and United States: 2020 and 2021

State and variety	Area harvested	Strung for harvest
	2020	2021
	(acres)	(acres)
Idaho		
Amarillo [®] , VGXP01	538	408
Cascade	407	439
Cashmere	125	183
Chinook	624	534
Citra [®] , HBC 394	1,527	1,823
Columbus/Tomahawk/Zeus	1,457	985
Comet	93	148
El Dorado [®]	526	621
Eureka! [™]	(D)	322
Hallertauer Mittelfruher	159	159
Idaho 7 [™]	564	561
Mosaic [®] , HBC 369	1,186	1,355
Mt. Rainier	(D)	85
Northern Brewer	58	58
Saaz	(D)	380
Simcoe [®] , YCR 14	425	386
Triumph	39	55
Willamette	(D)	459
Other varieties ¹	1,540	823
Total	9,268	9,784
Oregon		
Amarillo [®] , VGXP01	216	193
Cascade	754	709
Centennial	489	372
Chinook	86	79
Citra [®] , HBC 394	1,327	1,499
Crystal	(D)	178
Golding	(D)	78
Liberty	56	54
Mosaic [®] , HBC 369	595	841
Mt. Hood	159	128
Mt. Rainier	(D)	143
Nugget	826	592
Sabro [™] , HBC 438	74	225
Simcoe [®] , YCR 14	474	499
Sterling	58	59
Strata OR 91331	484	829
Super Galena [™]	87	(D)
Tahoma	(D)	103
Willamette	605	455
Other varieties ¹	814	535
Total	7,104	7,571

See footnote(s) at end of table.

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Hops Area Harvested by Variety – States and United States: 2020 and 2021 (continued)

State and variety	Area harvested	Strung for harvest
	2020	2021
	(acres)	(acres)
Washington		
Ahtanum TM , YCR 1	230	168
Amarillo ^R , VGXP01	1,395	1,368
Apollo TM	750	(D)
Azacca TM , ADHA-483	722	731
Bravo TM	201	239
Cascade	2,877	3,060
Cashmere	448	725
Centennial	2,444	1,886
Chinook	1,183	1,213
Citra ^R , HBC 394	8,143	8,672
Cluster	413	352
Columbus/Tomahawk/Zeus	4,829	4,608
Comet	330	300
Ekuanot ^R , HBC 366	641	487
El Dorado ^R	1,058	989
Eureka! TM	465	468
Galena	241	(D)
Idaho 7 TM	341	327
Idaho Gem TM	(NA)	87
Jarrylo ^R , ADHA-881	17	(D)
Loral ^R , HBC 291	164	195
Mosaic ^R , HBC 369	3,715	4,178
Mt. Hood	48	36
Mt. Rainier	223	212
Nugget	(D)	19
Pahto TM , HBC 682	2,208	2,099
Palisade ^R , YCR 4	246	348
Pekko ^R , ADHA-871	801	1,066
Sabro TM , HBC 438	1,145	1,122
Simcoe ^R , YCR 14	3,214	3,266
Summit TM	640	438
Super Galena TM	475	480
Tahoma	177	383
Warrior ^R , YCR 5	283	177
Willamette	203	129
Experimental	453	617
Other varieties ¹	1,546	2,935
Total	42,269	43,380
United States²	58,641	60,735

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

(NA) Not available.

^R Registered

TM Trademark

¹ Includes data withheld to avoid disclosure of individual operations and varieties not listed.

² Includes 875 organic acres in 2021 and 770 organic acres in 2020.

Utilized Production of Citrus Fruits by Crop – States and United States: 2019-2020 and Forecasted June 1, 2021

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

Crop and State	Utilized production boxes ¹		Utilized production ton equivalent	
	2019-2020	2020-2021	2019-2020	2020-2021
	(1,000 boxes)	(1,000 boxes)	(1,000 tons)	(1,000 tons)
Oranges				
California, all ²	54,100	52,000	2,164	2,080
Early, mid, and Navel ³	43,300	42,000	1,732	1,680
Valencia	10,800	10,000	432	400
Florida, all	67,400	52,700	3,033	2,372
Early, mid, and Navel ³	29,650	22,700	1,334	1,022
Valencia	37,750	30,000	1,699	1,350
Texas, all ²	1,340	1,050	57	45
Early, mid, and Navel ³	1,150	1,000	49	43
Valencia	190	50	8	2
United States, all	122,840	105,750	5,254	4,497
Early, mid, and Navel ³	74,100	65,700	3,115	2,745
Valencia	48,740	40,050	2,139	1,752
Grapefruit				
California ²	4,700	4,200	188	168
Florida, all	4,850	4,100	207	174
Red ⁴	4,060	(NA)	173	(NA)
White ⁴	790	(NA)	34	(NA)
Texas ²	4,400	2,400	176	96
United States	13,950	10,700	571	438
Tangerines and mandarins ⁵				
California ²	22,400	23,000	896	920
Florida	1,020	890	48	42
United States	23,420	23,890	944	962
Lemons ²				
Arizona	1,800	1,800	72	72
California	25,300	22,000	1,012	880
United States	27,100	23,800	1,084	952

(NA) Not available.

¹ Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California-80, Florida-85, Texas-80; tangerines and mandarins in California-80, Florida-95; lemons-80.

² Estimates for current year carried forward from an earlier forecast.

³ Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas.

⁴ Estimates discontinued in 2020-2021.

⁵ Includes tangelos and tangors.

Tart Cherry Production – States and United States: 2020 and Forecasted June 1, 2021

State	Total production	
	2020	2021
	(million pounds)	(million pounds)
Michigan	69.3	65.6
New York	9.9	8.3
Utah	28.8	36.5
Washington	21.4	23.1
Wisconsin	10.1	8.5
United States	139.5	142.0

Sweet Cherry Production – States and United States: 2020 and Forecasted June 1, 2021

State	Total production	
	2020	2021
	(tons)	(tons)
California	66,700	80,000
Oregon	56,400	49,000
Washington	202,000	240,000
United States	325,100	369,000

Maple Syrup Taps, Yield, and Production – States and United States: 2019-2021

State	Number of taps			Yield per tap			Production		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
	(1,000 taps)	(1,000 taps)	(1,000 taps)	(gallons)	(gallons)	(gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)
Maine	1,950	1,970	1,890	0.267	0.299	0.262	520	590	495
Michigan	620	570	550	0.315	0.298	0.273	195	170	150
New Hampshire	540	530	530	0.274	0.291	0.240	148	154	127
New York	2,800	2,800	2,900	0.293	0.287	0.223	820	804	647
Pennsylvania	680	740	715	0.231	0.241	0.231	157	178	165
Vermont	6,000	5,700	5,900	0.345	0.342	0.261	2,070	1,950	1,540
Wisconsin	800	780	850	0.338	0.340	0.353	270	265	300
United States	13,390	13,090	13,335	0.312	0.314	0.257	4,180	4,111	3,424

Maple Syrup Price and Value – States and United States: 2019-2021

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

State	Average price per gallon			Value of production		
	2019	2020	2021 ¹	2019	2020	2021 ¹
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Maine	28.20	34.90		14,664	20,591	
Michigan	48.60	48.60		9,477	8,262	
New Hampshire	45.30	52.10		6,704	8,023	
New York	32.20	34.40		26,404	27,658	
Pennsylvania	35.00	38.40		5,495	6,835	
Vermont	28.00	27.00		57,960	52,650	
Wisconsin	32.50	29.10		8,775	7,712	
United States	31.00	32.00		129,479	131,731	

¹ Price and value for 2021 will be published in *Crop Production* released June 2022.

Maple Syrup Season – States and United States: 2019-2021

State	Date season opened ¹			Date season closed ²			Average season length ³		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
	(date)	(date)	(date)	(date)	(date)	(date)	(days)	(days)	(days)
Maine	Jan 15	Feb 2	Feb 15	May 10	May 5	Apr 30	31	39	31
Michigan	Feb 10	Feb 2	Feb 1	Apr 26	Apr 25	Apr 14	25	29	25
New Hampshire	Jan 21	Jan 5	Jan 11	Apr 28	Apr 28	Apr 16	31	35	26
New York	Jan 5	Jan 2	Jan 1	May 1	Apr 30	May 4	32	37	29
Pennsylvania	Jan 10	Jan 12	Jan 4	May 1	Apr 10	Apr 15	35	31	25
Vermont	Jan 9	Jan 8	Jan 25	May 3	Apr 30	Apr 23	34	38	28
Wisconsin	Mar 1	Feb 15	Feb 20	Apr 30	Apr 26	May 20	24	29	25
United States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	30	34	27

(NA) Not available.

¹ Approximately the first day that sap was collected.

² Approximately the last day that sap was collected.

³ The average number of days that sap was collected.

Maple Syrup Average Open and Close Season Dates – States and United States: 2019-2021

State	Season Opened ¹			Season Closed ²		
	2019	2020	2021	2019	2020	2021
	(date)	(date)	(date)	(date)	(date)	(date)
Maine	Mar 14	Feb 29	Mar 6	Apr 14	Apr 8	Apr 6
Michigan	Mar 13	Mar 1	Mar 2	Apr 7	Mar 30	Mar 28
New Hampshire	Mar 10	Feb 24	Mar 6	Apr 10	Mar 30	Apr 1
New York	Mar 6	Feb 19	Mar 4	Apr 7	Mar 28	Apr 2
Pennsylvania	Feb 25	Feb 18	Feb 27	Apr 1	Mar 20	Mar 24
Vermont	Mar 12	Feb 28	Mar 8	Apr 15	Apr 6	Apr 5
Wisconsin	Mar 21	Mar 7	Mar 6	Apr 14	Apr 4	Mar 31
United States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available.

¹ Approximate average opened date based on reported data.

² Approximate average closed date based on reported data.

Maple Syrup Price by Type of Sale and Size of Container – States: 2019 and 2020

Type and State	Gallon		1/2 Gallon		Quart		Pint		1/2 Pint	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)
Retail										
Maine	50.40	53.00	30.50	31.20	17.50	19.20	10.50	10.20	6.60	6.70
Michigan	48.40	48.50	26.60	28.30	14.60	16.30	11.60	10.80	8.50	10.00
New Hampshire	52.00	58.00	31.70	31.70	18.80	18.60	11.30	10.70	6.40	(D)
New York	47.30	48.10	27.20	27.60	15.90	16.60	9.60	10.60	6.80	7.10
Pennsylvania	45.50	43.60	25.00	25.50	15.00	15.70	8.85	9.60	5.85	5.60
Vermont	44.50	45.50	26.70	25.10	17.90	15.60	10.60	9.30	7.00	6.10
Wisconsin	42.80	41.30	27.00	22.30	14.00	11.90	8.00	7.40	5.80	(D)
Wholesale										
Maine	47.50	46.20	24.90	(D)	13.90	13.70	7.40	7.80	4.65	4.80
Michigan	37.90	42.60	20.10	22.80	12.20	11.90	8.80	7.80	6.60	6.60
New Hampshire	42.90	45.50	27.10	(D)	14.80	12.70	8.30	6.90	4.85	4.10
New York	42.40	40.60	21.90	23.30	12.60	13.80	7.30	9.40	4.30	5.70
Pennsylvania	39.10	40.50	21.90	18.80	12.60	11.20	7.25	6.20	4.65	3.40
Vermont	39.90	40.20	23.30	22.80	14.00	12.70	7.20	6.30	4.50	3.80
Wisconsin	42.60	37.20	22.60	22.90	13.30	12.10	7.20	6.50	4.50	5.10

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

Maple Syrup Bulk Price – States: 2019 and 2020

State	Bulk all grades		Bulk all grades	
	2019	2020	2019	2020
	(dollars per pound)	(dollars per pound)	(dollars per gallon)	(dollars per gallon)
Maine	2.36	2.26	26.00	24.90
Michigan	2.40	2.00	26.70	21.70
New Hampshire	2.05	2.05	22.80	22.60
New York	2.20	2.10	23.70	23.50
Pennsylvania	2.11	2.21	23.20	24.40
Vermont	2.20	2.15	24.20	23.80
Wisconsin	2.20	2.10	23.80	23.20

Maple Syrup Percent of Sales by Type – States: 2019 and 2020

State	Retail		Wholesale		Bulk	
	2019	2020	2019	2020	2019	2020
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Maine	4	3	2	6	94	91
Michigan	31	40	22	17	47	43
New Hampshire	37	35	29	48	34	17
New York	19	19	13	12	68	69
Pennsylvania	32	45	12	8	56	47
Vermont	9	9	4	3	87	88
Wisconsin	20	17	7	6	73	77

Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2020 and 2021

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

Crop	Area planted		Area harvested	
	2020	2021	2020	2021
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Grains and hay				
Barley	2,621	2,590	2,133	
Corn for grain ¹	90,819	91,144	82,467	
Corn for silage	(NA)		6,719	
Hay, all	(NA)	(NA)	52,238	51,714
Alfalfa	(NA)		16,230	
All other	(NA)		36,008	
Oats	2,984	2,488	1,004	
Proso millet	609		484	
Rice	3,036	2,710	2,987	
Rye	1,955		330	
Sorghum for grain ¹	5,880	6,940	5,095	
Sorghum for silage	(NA)		239	
Wheat, all	44,349	46,358	36,746	
Winter	30,415	33,078	23,024	24,612
Durum	1,684	1,540	1,662	
Other spring	12,250	11,740	12,060	
Oilseeds				
Canola	1,825.0	2,115.0	1,789.0	
Cottonseed	(X)		(X)	
Flaxseed	305	400	296	
Mustard seed	97.0		91.4	
Peanuts	1,664.2	1,625.5	1,615.8	
Rapeseed	11.2		10.1	
Safflower	136.0		126.7	
Soybeans for beans	83,084	87,600	82,318	
Sunflower	1,718.7	1,216.0	1,665.7	
Cotton, tobacco, and sugar crops				
Cotton, all	12,092.0	12,036.0	8,274.5	
Upland	11,890.0	11,894.0	8,080.5	
American Pima	202.0	142.0	194.0	
Sugarbeets	1,162.2	1,169.0	1,142.3	
Sugarcane	(NA)		947.6	
Tobacco	(NA)	(NA)	198.1	195.8
Dry beans, peas, and lentils				
Chickpeas	269.8	290.0	262.9	
Dry edible beans	1,740.0	1,540.0	1,676.5	
Dry edible peas	999.0	893.0	973.0	
Lentils	528.0	611.0	514.0	
Potatoes and miscellaneous				
Hops	(NA)	(NA)	58.6	60.7
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		50.1	
Potatoes	921.0		914.1	
Spearmint oil	(NA)		17.7	

See footnote(s) at end of table.

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**Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States:
2020 and 2021 (continued)**

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

Crop	Yield per acre		Production	
	2020	2021	2020 (1,000)	2021 (1,000)
Grains and hay				
Barley bushels	77.5		165,324	
Corn for grain bushels	172.0		14,182,479	
Corn for silage tons	20.5		137,729	
Hay, all tons	2.43		126,812	
Alfalfa tons	3.27		53,067	
All other tons	2.05		73,745	
Oats bushels	65.1		65,355	
Proso millet bushels	19.0		9,210	
Rice ² cwt	7,619		227,583	
Rye bushels	34.9		11,532	
Sorghum for grain bushels	73.2		372,960	
Sorghum for silage tons	13.1		3,125	
Wheat, all bushels	49.7		1,825,820	
Winter bushels	50.9	53.2	1,171,022	1,309,000
Durum bushels	41.4		68,808	
Other spring bushels	48.6		585,990	
Oilseeds				
Canola pounds	1,931		3,454,950	
Cottonseed tons	(X)		4,509.0	
Flaxseed bushels	19.3		5,706	
Mustard seed pounds	895		81,770	
Peanuts pounds	3,796		6,133,900	
Rapeseed pounds	1,971		19,910	
Safflower pounds	1,167		147,800	
Soybeans for beans bushels	50.2		4,135,477	
Sunflower pounds	1,790		2,982,410	
Cotton, tobacco, and sugar crops				
Cotton, all ² bales	847		14,607.5	
Upland ² bales	835		14,061.0	
American Pima ² bales	1,352		546.5	
Sugarbeets tons	29.4		33,618	
Sugarcane tons	38.1		36,100	
Tobacco pounds	1,966		389,413	
Dry beans, peas, and lentils				
Chickpeas ² cwt	1,625		4,273	
Dry edible beans ² cwt	1,966		32,963	
Dry edible peas ² cwt	2,234		21,733	
Lentils ² cwt	1,442		7,411	
Potatoes and miscellaneous				
Hops pounds	1,770		103,810.3	
Maple syrup gallons	(NA)	(NA)	4,111	3,424
Mushrooms pounds	(NA)		816,367	
Peppermint oil pounds	99		4,984	
Potatoes cwt	453		414,248	
Spearmint oil pounds	121		2,134	

(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: 2020 and 2021

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

Crop	Area planted		Area harvested	
	2020	2021	2020	2021
	(hectares)	(hectares)	(hectares)	(hectares)
Grains and hay				
Barley	1,060,690	1,048,150	863,200	
Corn for grain ¹	36,753,540	36,885,070	33,373,570	
Corn for silage	(NA)		2,719,110	
Hay, all ²	(NA)	(NA)	21,140,200	20,928,140
Alfalfa	(NA)		6,568,120	
All other	(NA)		14,572,080	
Oats	1,207,590	1,006,870	406,310	
Proso millet	246,460		195,870	
Rice	1,228,640	1,096,710	1,208,810	
Rye	791,170		133,550	
Sorghum for grain ¹	2,379,580	2,808,550	2,061,900	
Sorghum for silage	(NA)		96,720	
Wheat, all ²	17,947,600	18,760,620	14,870,740	9,960,230
Winter	12,308,650	13,386,340	9,317,580	
Durum	681,500	623,220	672,590	
Other spring	4,957,450	4,751,060	4,880,560	
Oilseeds				
Canola	738,560	855,920	723,990	
Cottonseed	(X)		(X)	
Flaxseed	123,430	161,880	119,790	
Mustard seed	39,250		36,990	
Peanuts	673,490	657,820	653,900	
Rapeseed	4,530		4,090	
Safflower	55,040		51,270	
Soybeans for beans	33,623,260	35,450,840	33,313,270	
Sunflower	695,540	492,100	674,090	
Cotton, tobacco, and sugar crops				
Cotton, all ²	4,893,510	4,870,850	3,348,610	
Upland	4,811,760	4,813,380	3,270,100	
American Pima	81,750	57,470	78,510	
Sugarbeets	470,330	473,080	462,280	
Sugarcane	(NA)		383,480	
Tobacco	(NA)	(NA)	80,150	79,240
Dry beans, peas, and lentils				
Chickpeas	109,190	117,360	106,390	
Dry edible beans	704,160	623,220	678,460	
Dry edible peas	404,290	361,390	393,760	
Lentils	213,680	247,270	208,010	
Potatoes and miscellaneous				
Hops	(NA)	(NA)	23,730	24,580
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		20,270	
Potatoes	372,720		369,930	
Spearmint oil	(NA)		7,160	

See footnote(s) at end of table.

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**Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States:
2020 and 2021 (continued)**

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

Crop	Yield per hectare		Production	
	2020	2021	2020	2021
	(metric tons)	(metric tons)	(metric tons)	(metric tons)
Grains and hay				
Barley	4.17		3,599,510	
Corn for grain	10.79		360,251,560	
Corn for silage	45.95		124,945,650	
Hay, all ²	5.44		115,041,910	
Alfalfa	7.33		48,141,570	
All other	4.59		66,900,340	
Oats	2.33		948,630	
Proso millet	1.07		208,880	
Rice	8.54		10,322,990	
Rye	2.19		292,930	
Sorghum for grain	4.59		9,473,620	
Sorghum for silage	29.31		2,834,950	
Wheat, all ²	3.34		49,690,680	
Winter	3.42	3.58	31,870,000	35,625,140
Durum	2.78		1,872,650	
Other spring	3.27		15,948,030	
Oilseeds				
Canola	2.16		1,567,140	
Cottonseed	(X)		4,090,500	
Flaxseed	1.21		144,940	
Mustard seed	1.00		37,090	
Peanuts	4.25		2,782,290	
Rapeseed	2.21		9,030	
Safflower	1.31		67,040	
Soybeans for beans	3.38		112,549,240	
Sunflower	2.01		1,352,800	
Cotton, tobacco, and sugar crops				
Cotton, all ²	0.95		3,180,410	
Upland	0.94		3,061,420	
American Pima	1.52		118,990	
Sugarbeets	65.97		30,497,740	
Sugarcane	85.40		32,749,370	
Tobacco	2.20		176,630	
Dry beans, peas, and lentils				
Chickpeas	1.82		193,820	
Dry edible beans	2.20		1,495,180	
Dry edible peas	2.50		985,790	
Lentils	1.62		336,160	
Potatoes and miscellaneous				
Hops	1.98		47,090	
Maple syrup	(NA)	(NA)	20,560	17,120
Mushrooms	(NA)		370,300	
Peppermint oil	0.11		2,260	
Potatoes	50.79		18,789,970	
Spearmint oil	0.14		970	

(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: 2020 and 2021

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2021 crop year, except citrus which is for the 2020-2021 season. Blank data cells indicate estimation period has not yet begun]

Crop	Production	
	2020	2021
Citrus ¹		
Grapefruit 1,000 tons	571	438
Lemons 1,000 tons	1,084	952
Oranges 1,000 tons	5,254	4,497
Tangerines and mandarins 1,000 tons	944	962
Noncitrus		
Apples, commercial million pounds	10,253.0	
Apricots tons	33,400	
Avocados tons	206,610	
Blueberries, Cultivated 1,000 pounds	648,200	
Blueberries, Wild (Maine) 1,000 pounds	47,400	
Cherries, Sweet tons	325,100	369,000
Cherries, Tart million pounds	139.5	142.0
Coffee (Hawaii) 1,000 pounds	23,870	
Cranberries barrel	7,830,000	
Dates tons	62,600	
Grapes tons	5,940,000	
Kiwifruit (California) tons	40,000	
Nectarines (California) tons	122,500	
Olives (California) tons	67,700	
Papayas (Hawaii) 1,000 pounds	8,280	
Peaches tons	617,760	
Pears tons	672,000	
Plums (California) tons	105,000	
Prunes (California) tons	165,880	
Raspberries 1,000 pounds	222,000	
Strawberries 1,000 cwt	23,280.0	
Nuts and miscellaneous		
Almonds, shelled (California) 1,000 pounds	3,115,000	3,200,000
Hazelnuts, in-shell (Oregon) tons	63,000	
Macadamias (Hawaii) 1,000 pounds	39,500	
Pecans, in-shell 1,000 pounds	305,360	
Pistachios (California) 1,000 pounds	1,045,000	
Walnuts, in-shell (California) tons	785,000	

¹ Production years are 2019-2020 and 2020-2021.

Fruits and Nuts Production in Metric Units – United States: 2020 and 2021

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2021 crop year, except citrus which is for the 2020-2021 season. Blank data cells indicate estimation period has not yet begun]

Crop	Production	
	2020 (metric tons)	2021 (metric tons)
Citrus¹		
Grapefruit	518,000	397,350
Lemons	983,390	863,640
Oranges	4,766,350	4,079,610
Tangerines and mandarins	856,380	872,710
Noncitrus		
Apples, commercial	4,650,680	
Apricots	30,300	
Avocados	187,430	
Blueberries, Cultivated	294,020	
Blueberries, Wild (Maine)	21,500	
Cherries, Sweet	294,930	334,750
Cherries, Tart	63,280	64,410
Coffee (Hawaii)	10,830	
Cranberries	355,160	
Dates	56,790	
Grapes	5,388,680	
Kiwifruit (California)	36,290	
Nectarines (California)	111,130	
Olives (California)	61,420	
Papayas (Hawaii)	3,760	
Peaches	560,420	
Pears	609,630	
Plums (California)	95,250	
Prunes (California)	150,480	
Raspberries	100,700	
Strawberries	1,055,960	
Nuts and miscellaneous		
Almonds, shelled (California)	1,412,940	1,451,500
Hazelnuts, in-shell (Oregon)	57,150	
Macadamias (Hawaii)	17,920	
Pecans, in-shell	138,510	
Pistachios (California)	474,000	
Walnuts, in-shell (California)	712,140	

¹ Production years are 2019-2020 and 2020-2021.

Winter Wheat for Grain Objective Yield Data

The National Agricultural Statistics Service is conducting objective yield surveys in 10 winter wheat-producing States during 2021. Randomly selected plots in winter wheat for grain fields are visited monthly from May through harvest to obtain specific counts and measurements. Data in this table are based on counts from this survey.

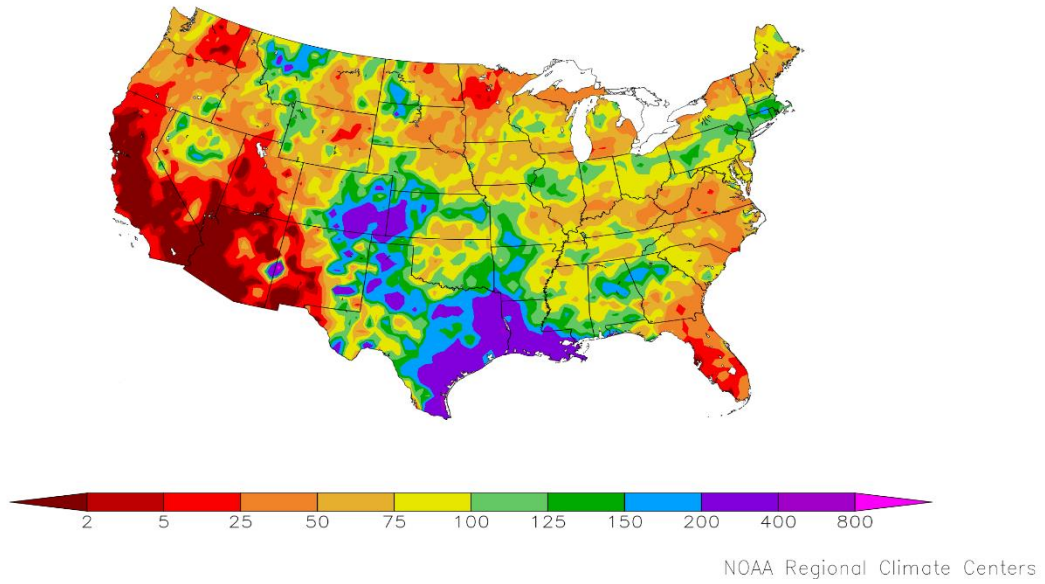
Winter Wheat Objective Yield Percent of Samples Processed in the Lab – United States: 2017-2021

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

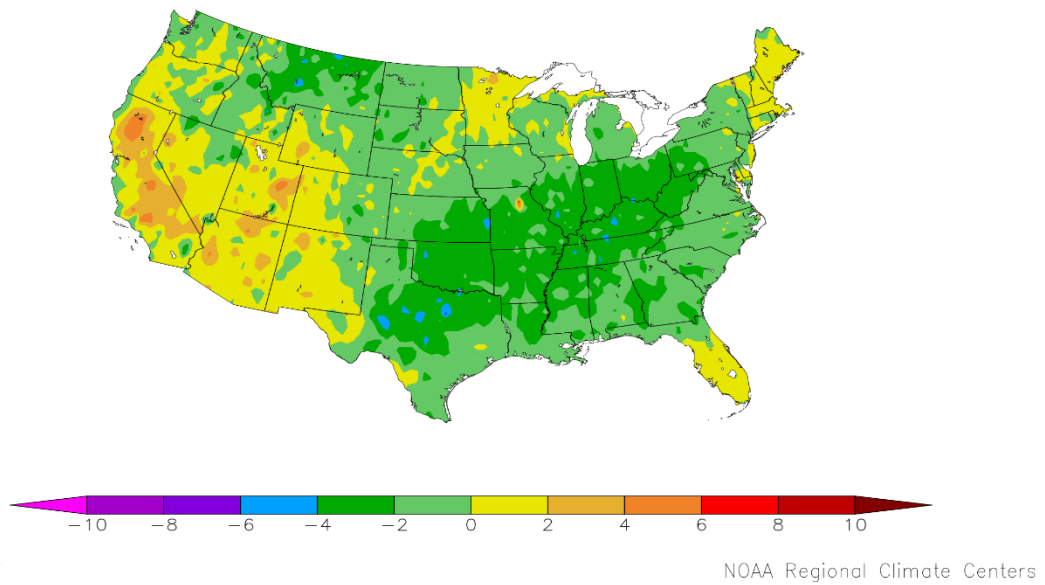
Year	June	July	August
	Mature ¹	Mature ¹	Mature ¹
	(percent)	(percent)	(percent)
2017	28	69	93
2018	18	69	93
2019	8	50	89
2020	14	64	92
2021	7		

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

Percent of Normal Precipitation (%)
5/1/2021 – 5/31/2021



Departure from Normal Temperature (F)
5/1/2021 – 5/31/2021



May Weather Summary

Frequent rain eased or eradicated drought across the central and southern Plains, benefiting rangeland, pastures, and spring-sown crops, but hampering initial winter wheat harvest efforts. By May 30, Texas' winter wheat harvest was just 18 percent complete, compared with 31 percent at the same time a year ago and the 5-year average of 24 percent.

Rain also dampened the northern Plains and the Northwest, but improvements in the drought situation were limited by lingering subsoil moisture shortages and poor rangeland and pasture conditions. Even with the May precipitation, well over one-half of the rangeland and pastures in North Dakota (67 percent) and Montana (56 percent) were rated in very poor to poor condition toward month's end, according to USDA/NASS. Adverse rangeland conditions extended into much of the West, where an additional six states—Arizona, California, New Mexico, Oregon, Utah, and Washington—reported very poor to poor ratings ranging from 50 to 88 percent.

The poor start to the 2021 growing season extended to predominantly Northern crops such as spring wheat and barley. By May 30, one-fifth (20 percent) of the Nation's spring wheat and 13 percent of the barley were rated in very poor to poor condition. Among major production states, Washington led the country on May 30 in very poor to poor ratings for both crops—51 percent of its spring wheat and 40 percent of its barley.

Mainly due to rain across the Plains, national drought coverage decreased from 48 to 44 percent during the 5-week period ending June 1, according to the *United States Drought Monitor*. During the same 5 weeks, drought coverage in the 11-state Western region decreased slightly from 84 to 82 percent, on the strength of improving conditions across the eastern slopes of the Rockies. However, Western coverage of extreme to exceptional drought (D3 to D4) increased by more than 3 percentage points during May, approaching 47 percent. Western wildfire and water-supply concerns continued to mount, fueled by depleted soil moisture, prematurely melted mountain snow, low reservoir levels, and ample cured vegetation.

The middle and southern Atlantic States also experienced May dryness, leading to topsoil moisture shortages and stress on pastures and emerging summer crops. In South Carolina, where topsoil moisture was rated 66 percent very short to short by May 30, more than one-quarter (26 percent) of the cotton and 22 percent of the peanuts were rated in very poor to poor condition. On the same date, topsoil moisture was rated 75 percent very short to short in Georgia, along with 70 percent in Florida. In contrast, wet weather led to fieldwork delays and local flooding from the western Gulf Coast region to the Mississippi Delta, where monthly rainfall totals of 10 to 20 inches or more were common. Louisiana led the Nation on May 30 with topsoil moisture rated 49 percent surplus.

May featured numerous temperature swings, though the overall tendency was toward cooler conditions east of the Rockies and warm weather in the West. Some of the coolest May weather, relative to normal, covered the northern High Plains or stretched from the southern Plains into the Ohio Valley and interior Southeast. The hottest conditions (temperatures locally averaging more than 5°F above normal) affected California. Late in the month, freezes were reported in several areas across the Nation's Northern Tier, burning back tender vegetation such as emerged summer crops. Scattered, late-month frost was noted in a broader area across the northern Plains, upper Midwest, Great Lakes, and interior Northeast.

May Agricultural Summary

May was cooler than average for most of the eastern and central thirds of the Nation. Large parts of the Mississippi Valley, Ohio Valley, and southern Plains recorded temperatures 2°F or more below normal. While much of the northern Rockies also recorded below normal temperatures for the month, most of the western third of the Nation was warmer than average. Large parts of California recorded temperatures 2°F or more above normal. While most of the eastern and western thirds of the Nation remained drier than normal, twice the normal amount of rainfall was recorded in parts of Colorado, Kansas, Louisiana, and Texas. Large parts of the western Gulf Coast received 12 inches or more of rain for the month.

By May 2, producers had planted 46 percent of the Nation's corn crop, 2 percentage points behind last year but 10 percentage points ahead of the 5-year average. Eight percent of the Nation's corn acreage had emerged by May 2,

one percentage point ahead of the previous year but 1 percentage point behind the 5-year average. By May 16, producers had planted 80 percent of the Nation's corn crop, 2 percentage points ahead of last year and 12 percentage points ahead of the 5-year average. Forty-one percent of the Nation's corn acreage had emerged by May 16, one percentage point ahead of the previous year and 6 percentage points ahead of the 5-year average. By May 30, producers had planted 95 percent of the Nation's corn crop, 3 percentage points ahead of last year and 8 percentage points ahead of the 5-year average. At that time, corn planting progress was at or ahead of the 5-year average in 16 of the 18 estimating States. Eighty-one percent of the Nation's corn acreage had emerged by May 30, five percentage points ahead of the previous year and 11 percentage points ahead of the 5-year average. On May 30, seventy-six percent of the Nation's corn acreage was rated in good to excellent condition, 2 percentage points above the same time last year.

Twenty-four percent of the Nation's soybean acreage was planted by May 2, three percentage points ahead of last year and 13 percentage points ahead of the 5-year average. Sixty-one percent of the Nation's soybean acreage was planted by May 16, ten percentage points ahead of last year and 24 percentage points ahead of the 5-year average. Twenty percent of the Nation's soybean acreage had emerged by May 16, four percentage points ahead of last year and 8 percentage points ahead of the 5-year average. Eighty-four percent of the Nation's soybean acreage was planted by May 30, ten percentage points ahead of last year and 17 percentage points ahead of the 5-year average. At that time, soybean planting progress was ahead of the 5-year average in 16 of the 18 estimating States. Sixty-two percent of the Nation's soybean acreage had emerged by May 30, twelve percentage points ahead of last year and 20 percentage points ahead of the 5-year average.

By May 2, twenty-seven percent of the Nation's winter wheat crop was headed, 3 percentage points behind the previous year and 7 percentage points behind the 5-year average. By May 16, fifty-three percent of the Nation's winter wheat crop was headed, 1 percentage point behind the previous year and 5 percentage points behind the 5-year average. By May 30, seventy-nine percent of the Nation's winter wheat crop was headed, 3 percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. On May 30, forty-eight percent of the 2021 winter wheat crop was reported in good to excellent condition, 3 percentage points below the same time last year.

Nationwide, 16 percent of the cotton crop was planted by May 2, one percentage point behind the previous year but equal to the 5-year average. Nationwide, 38 percent of the cotton crop was planted by May 16, four percentage points behind the previous year and 2 percentage points behind the 5-year average. Nationwide, 64 percent of the cotton crop was planted by May 30, equal to the previous year but 1 percentage point behind the 5-year average. Six percent of the Nation's cotton acreage had reached the squaring stage by May 30, two percentage points behind last year and 1 percentage point behind the 5-year average. On May 30, forty-three percent of the 2021 cotton acreage was rated in good to excellent condition, 1 percentage point below last year.

Twenty percent of the Nation's sorghum acreage was planted by May 2, two percentage points behind the previous year and 4 percentage points behind the 5-year average. Twenty-seven percent of the Nation's sorghum acreage was planted by May 16, four percentage points behind the previous year and 5 percentage points behind the 5-year average. Forty-one percent of the Nation's sorghum acreage was planted by May 30, seven percentage points behind the previous year and 4 percentage points behind the 5-year average.

By May 2, producers had seeded 64 percent of the Nation's 2021 rice acreage, 16 percentage points ahead of the previous year and 4 percentage points ahead of the 5-year average. By May 2, thirty-eight percent of the Nation's rice acreage had emerged, 7 percentage points ahead of last year but 5 percentage points behind the 5-year average. By May 16, producers had seeded 87 percent of the Nation's 2021 rice acreage, 8 percentage points ahead of the previous year and 6 percentage points ahead of the 5-year average. By May 16, sixty-three percent of the Nation's rice acreage had emerged, 8 percentage points ahead of last year but 1 percentage point behind the 5-year average. By May 23, producers had seeded 95 percent of the Nation's 2021 rice acreage, 7 percentage points ahead of the previous year and 5 percentage points ahead of the 5-year average. Planting progress was ahead of the 5-year average in 5 of the 6 estimating States at that time. By May 30, eighty-six percent of the Nation's rice acreage had emerged, 6 percentage points ahead of last year and 3 percentage points ahead of the 5-year average. On May 30, seventy-four percent of the Nation's rice acreage was rated in good to excellent condition, 5 percentage points above the same time last year.

Nationally, oat producers had seeded 72 percent of this year's acreage by May 2, seven percentage points ahead of the previous year and 10 percentage points ahead of the 5-year average. At that time, Oat planting progress was at or ahead of

the 5-year average in all 9 estimating States. Forty-seven percent of the Nation's oat acreage had emerged by May 2, five percentage points ahead of last year and 4 percentage points ahead of the 5-year average. Nationally, oat producers had seeded 92 percent of this year's acreage by May 16, seven percentage points ahead of the previous year and 8 percentage points ahead of the 5-year average. Seventy-three percent of the Nation's oat acreage had emerged by May 16, six percentage points ahead of last year and 7 percentage points ahead of the 5-year average. Ninety-one percent of the Nation's oat acreage had emerged by May 30, six percentage points ahead of last year and five percentage points ahead of the 5-year average. Thirty-one percent of the Nation's oat acreage had headed by May 30, four percentage points ahead of last year and three percentage points ahead of the 5-year average. On May 30, fifty-five percent of the Nation's oat acreage was rated in good to excellent condition, 16 percentage points below the same time last year.

Fifty-three percent of the Nation's barley crop was planted by May 2, fourteen percentage points ahead of last year and 12 percentage points ahead of the 5-year average. Seventeen percent of the Nation's barley crop had emerged by May 2, six percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. Eighty-three percent of the Nation's barley crop was planted by May 16, thirteen percentage points ahead of last year and 7 percentage points ahead of the 5-year average. Fifty percent of the Nation's barley crop had emerged by May 16, nine percentage points ahead of the previous year and 6 percentage points ahead of the 5-year average. Ninety-five percent of the Nation's barley crop was planted by May 30, three percentage points ahead of last year and 1 percentage point ahead of the 5-year average. Seventy-nine percent of the Nation's barley crop had emerged by May 30, seven percentage points ahead of the previous year and 3 percentage points ahead of the 5-year average. On May 30, forty-eight percent of the Nation's barley acreage was rated in good to excellent condition, 21 percentage points below the same time last year.

By May 2, forty-nine percent of the Nation's spring wheat crop was seeded, 22 percentage points ahead of last year and 17 percentage points ahead of the 5-year average. By May 2, fourteen percent of the Nation's spring wheat crop had emerged, 8 percentage points ahead of the previous year and 4 percentage points ahead of the 5-year average. By May 16, eighty-five percent of the Nation's spring wheat crop had been seeded, 28 percentage points ahead of last year and 14 percentage points ahead of the 5-year average. By May 16, forty-seven percent of the Nation's spring wheat crop had emerged, 19 percentage points ahead of the previous year and 11 percentage points ahead of the 5-year average. By May 30, ninety-seven percent of the Nation's spring wheat crop had been seeded, 7 percentage points ahead of last year and 4 percentage points ahead of the 5-year average. Planting progress was ahead of the 5-year average in all 6 estimating States at that time. By May 30, eighty percent of the Nation's spring wheat crop had emerged, 15 percentage points ahead of the previous year and 7 percentage points ahead of the 5-year average. On May 30, forty-three percent of the Nation's spring wheat was rated in good to excellent condition, 37 percentage points below the same time last year.

Nationally, producers had planted 11 percent of the 2021 peanut acreage by May 2, two percentage points behind the previous year and 4 percentage points behind the 5-year average. Nationally, producers had planted 40 percent of the 2021 peanut acreage by May 16, three percentage points behind the previous year and 9 percentage points behind the 5-year average. Nationally, producers had planted 77 percent of the 2021 peanut acreage by May 30, one percentage point ahead of the previous year but 3 percentage points behind the 5-year average. On May 30, sixty-five percent of the Nation's peanut acreage was rated in good to excellent condition, 3 percentage points below the same time last year.

By May 2, eighty-one percent of the Nation's sugarbeet crop was planted, 34 percentage points ahead of last year and 30 percentage points ahead of the 5-year average. By May 9, ninety-seven percent of the Nation's sugarbeet crop had been planted, 39 percentage points ahead of last year and 26 percentage points ahead of the 5-year average.

Six percent of the Nation's intended 2021 sunflower acreage was planted by May 16, two percentage points ahead of last year but 1 percentage point behind the 5-year average. Forty-two percent of the Nation's intended 2021 sunflower acreage was planted by May 30, thirteen percentage points ahead of last year and 7 percentage points ahead of the 5-year average.

Crop Comments

Winter wheat: Production is forecast at 1.31 billion bushels, up 2 percent from the May 1 forecast, and up 12 percent from 2020. As of June 1, the United States yield is forecast at 53.2 bushels per acre, up 1.1 bushels from last month and up 2.3 bushels from last year's average yield of 50.9 bushels per acre. If realized, the 2021 United States winter wheat yield will be the third highest on record. Record high yields are forecasted in Missouri and Montana. As of May 30, forty-

eight percent of the winter wheat acreage in the 18 major producing States was rated in good to excellent condition, 3 percentage points lower than at the same time last year. Nationally, 79 percent of the winter wheat crop was headed by May 30, one percentage point higher than the 5-year average pace.

Forecasted head counts from the objective yield survey in the six Hard Red Winter States (Colorado, Kansas, Montana, Nebraska, Oklahoma, and Texas) are below last year's level in Oklahoma and Texas but above in Colorado, Kansas, Montana, and Nebraska. As of May 30, Kansas, Oklahoma, and Texas winter wheat was rated in good to excellent condition at 61 percent, 57 percent, and 23 percent, respectively. In Texas, winter wheat harvest was 18 percent complete, 6 percentage points behind the 5-year average pace.

Forecasted head counts from the objective yield survey in the three Soft Red Winter States (Illinois, Missouri, and Ohio) are all above last year's levels. As of May 30, Illinois, Missouri, and Ohio winter wheat was rated 87 percent, 57 percent, and 77 percent, in good to excellent condition, respectively.

Forecasted head counts from the objective yield survey in Washington are below last year. As of May 30, Idaho, Oregon, and Washington winter wheat crop was rated in good to excellent condition at 40 percent, 10 percent, and 34 percent, respectively.

Durum wheat: Production of Durum wheat in Arizona and California is forecast at a collective 6.33 million bushels, up 2 percent from last month and up 6 percent from last year.

Grapefruit: The United States 2020-2021 grapefruit crop is forecast at 438,000 tons, down 1 percent from the previous forecast and down 23 percent from last season's final utilization. In Florida, expected production, at 4.10 million boxes (174,000 tons), is down 2 percent from the previous forecast and down 15 percent from last year. California and Texas grapefruit production forecasts were carried forward from the previous forecast.

Tangerines and mandarins: The United States tangerine and mandarin crop is forecast at 962,000 tons, down slightly from the previous forecast but up 2 percent from last season's final utilization. The Florida tangerine and mandarin forecast, at 890,000 boxes (42,000 tons), is down 1 percent from the previous forecast and down 13 percent from last season. The California tangerine and mandarin forecast was carried forward from the previous forecast.

Hops: Hop acreage strung for harvest in 2021 for Washington, Oregon, and Idaho is forecast at a record high 60,735 acres, 4 percent more than last year's previous record of 58,641 acres. Washington, with 43,380 acres for harvest, accounts for 71 percent of the total United States acreage. Idaho area strung for harvest was 9,784 acres, or 16 percent of the United States total. Oregon hop growers accounted for the remaining 13 percent, or 7,571 acres. Acreage increased from last year in all three States.

Cherries, Tart: United States tart cherry total production for 2021 is forecast at 142 million pounds, up 2 percent from the 2020 production.

In Michigan, the largest tart cherry producing State, frosts and freezing temperatures have reduced the crop. Additionally, all growing regions in Michigan are suffering from drought and growers are irrigating where available. In Wisconsin, a Memorial Day weekend frost has reduced yields. In Washington, tart cherries have experienced a relatively warm spring.

Cherries, Sweet: United States Sweet cherry total production for 2021 is forecast at 369,000 tons, up 14 percent from 2020.

In California, most trees received adequate chilling hours, despite an unusually warm winter. The weather during the bloom was favorable, though the bloom was earlier than normal in some locations. In Oregon, a relatively warm spring and low precipitation have weighed heavily on cherry growers. In Washington, several cold periods through the growing season forced growers to use smudge pots and other techniques to combat cold and winds in cherry orchards.

Maple syrup: The 2021 United States maple syrup production totaled 3.42 million gallons, down 17 percent from the previous season. The number of taps totaled 13.3 million, up 2 percent from the 2020 total. Yield per tap was 0.257 gallon, down 0.057 gallon from the previous season.

The earliest sap flow reported was January 1 in New York. The latest sap flow reported to open the season was February 20 in Wisconsin. On average, the season lasted 27 days, compared with 34 days in 2020. The 2020 United States average price per gallon was \$32.00, up \$1.00 from 2019. Value of production, at \$132 million for 2020, was up 2 percent from the 2019 season.

Statistical Methodology

Wheat survey procedures: Objective yield and farm operator surveys were conducted between May 24 and June 6 to gather information on expected yield as of June 1. The objective yield survey was conducted in 10 States that accounted for 70 percent of the 2020 winter wheat production. Farm operators were interviewed to update previously reported acreage data and seek permission to randomly locate two sample plots in selected winter wheat fields. The counts made within each sample plot depended upon the crop's maturity. Counts such as number of stalks, heads in late boot, and number of emerged heads were made to predict the number of heads that will be harvested. The counts are used with similar data from previous years to develop a projected biological yield. The average harvesting loss is subtracted to obtain a net yield. The plots are revisited each month until crop maturity when the heads are clipped, threshed, and weighed. After the farm operator has harvested the sample field, another plot is sampled to obtain current year harvesting loss.

The farm operator survey was conducted primarily by telephone with some use of mail, internet, and personal interview. Approximately 3,600 producers were interviewed during the survey period and asked questions about the probable yield on their operation. These growers will continue to be surveyed throughout the growing season to provide indications of average yields.

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

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

Orange estimating procedures: State level objective yield indications for Florida oranges were reviewed for errors, reasonableness, and consistency with historical estimates. The Florida Field Office submits its analysis of the current situation to the Agricultural Statistics Board (ASB). The ASB uses the Florida survey data and their analysis to prepare the published June 1 forecast. The June 1 orange production forecasts for California and Texas are carried forward from April.

Revision policy: The June 1 production forecast will not be revised; instead, a new forecast will be made each month throughout the growing season. End-of-season wheat estimates are made after harvest. At the end of the wheat marketing season, a balance sheet is calculated using carryover stocks, production, exports, millings, feeding, and ending stocks. Revisions are then made if the balance sheet relationships or other administrative data warrant changes. End-of-season orange estimates will be published in the *Citrus Fruits Summary* released in August. The orange production estimates are based on all data available at the end of the marketing season, including information from marketing orders, shipments, and processor records. Allowances are made for recorded local utilization and home use.

Reliability: To assist users in evaluating the reliability of the June 1 production forecast, the "Root Mean Square Error," a statistical measure based on past performance, is computed. The deviation between the June 1 production forecast and the final estimate is expressed as a percentage of the final estimate. The average of the squared percentage deviations for the latest 20-year period is computed. The square root of the average becomes statistically the "Root Mean Square Error." Probability statements can be made concerning expected differences in the current forecast relative to the final end-of-season estimate, assuming that factors affecting this year's forecast are not different from those influencing recent years.

The “Root Mean Square Error” for the June 1 winter wheat production forecast is 5.0 percent. This means that chances are 2 out of 3 that the current winter wheat production will not be above or below the final estimate by more than 5.0 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 8.6 percent.

Also shown in the following table is a 20-year record for selected crops of the differences between the June 1 forecast and the final estimate. Using winter wheat again as an example, changes between the June 1 forecast and final estimate during the last 20 years have averaged 59 million bushels, ranging from 4 million to 166 million bushels. The June 1 forecast has been below the final estimate 10 times and above 10 times. This does not imply that the June 1 winter wheat forecast this year is likely to understate or overstate final production.

Reliability of June 1 Crop Production Forecasts

[Based on data for the past twenty years]

Crop	Root mean square error	90 percent confidence interval	Difference between forecast and final estimate				
			Production			Years	
			Average	Smallest	Largest	Below final	Above final
	(percent)	(percent)	(millions)	(millions)	(millions)	(number)	(number)
Oranges ¹tons	2.0	3.4	119	18	272	9	11
Wheat Winter wheat bushels	5.0	8.6	59	4	166	10	10

¹ Quantity is in thousands of units.

USDA, National Agricultural Statistics Service Information Contacts

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

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Joshua Bates – Oats, Soybeans	(202) 690-3234
David Colwell – Current Agricultural Industrial Reports.....	(202) 720-8800
Becky Sommer – Cotton, Cotton Ginnings, Sorghum.....	(202) 720-5944
James Johanson – Barley, County Estimates, Hay	(202) 690-8533
Greg Lemmons – Corn, Flaxseed, Proso Millet.....	(202) 720-9526
James Johanson – Rye, Wheat	(202) 720-8068
John Stephens – Peanuts, Rice.....	(202) 720-7688
Travis Thorson – Sunflower, Other Oilseeds.....	(202) 720-7369
Fleming Gibson, Head, Fruits, Vegetables and Special Crops Section	(202) 720-2127
Heidi Lanouette – Blueberries, Cranberries, Cucumbers, Pistachios, Potatoes, Pumpkins, Raspberries, Squash, Strawberries, Sugarbeets, Sugarcane, Sweet Potatoes	(202) 720-4285
Robert Little – Apricots, Dry Beans, Lettuce, Macadamia, Maple Syrup, Nectarines, Pears, Snap Beans, Spinach, Tomatoes	(202) 720-3250
Fleming Gibson – Almonds, Apples, Asparagus, Carrots, Coffee, Onions Plums, Prunes, Sweet Corn, Tobacco.....	(202) 720-2127
Krishna Rizal – Artichokes, Cauliflower, Celery, Grapefruit, Garlic, Hazelnuts, Kiwifruit, Lemons, Mandarins and tangerines, Mint, Mushrooms, Olives, Oranges.....	(202) 720-5412
Chris Wallace – Avocados, Bell Peppers, Broccoli, Cabbage, Chickpeas, Chile Peppers, Dates, Floriculture, Grapes, Hops, Pecans	(202) 720-4215
Antonio Torres – Cantaloupes, Dry Edible Peas, Green Peas, Honeydews, Lentils, Papayas, Peaches, Sweet Cherries, Tart Cherries, Walnuts, Watermelons	(202) 720-2157

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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.

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