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Released May 10, 2017, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

## **Winter Wheat Production Down 25 Percent from 2016 Orange Production Up 1 Percent from April**

**Winter wheat** production is forecast at 1.25 billion bushels, down 25 percent from 2016. As of May 1, the United States yield is forecast at 48.8 bushels per acre, down 6.5 bushels from last year's record yield of 55.3 bushels per acre.

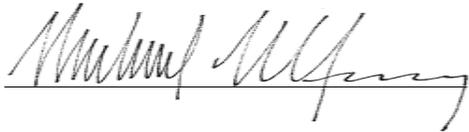
Hard Red Winter production, at 737 million bushels, is down 32 percent from a year ago. Soft Red Winter, at 297 million bushels, is down 14 percent from 2016. White Winter, at 212 million bushels, is down 13 percent from last year. Of the White Winter production, 16.8 million bushels are Hard White and 195 million bushels are Soft White.

**The United States all orange** forecast for the 2016-2017 season is 5.16 million tons, up 1 percent from last month but down 15 percent from the 2015-2016 final utilization. The Florida all orange forecast, at 68.0 million boxes (3.06 million tons), is up 1 percent from last month but down 17 percent from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 33.0 million boxes (1.49 million tons), unchanged from last month but down 9 percent from last season's final utilization. The Florida Valencia orange forecast, at 35.0 million boxes (1.58 million tons), is up 3 percent from last month but down 23 percent from last season's final utilization.

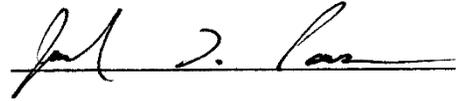
**Florida frozen concentrated orange juice (FCOJ)** yield forecast for the 2016-2017 season is 1.41 gallons per box at 42.0 degrees Brix, down 1 percent from last month but unchanged from last season's final yield of 1.41 gallons per box. The early and midseason portion is final at 1.34 gallons per box, down 1 percent from last season's final yield of 1.35 gallons per box. The Valencia portion is projected at 1.53 gallons per box, down 1 percent from last month but up 4 percent from last year's final yield of 1.47 gallons per box. All projections of yield assume the processing relationships this season will be similar to those of the past several seasons.

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This report was approved on May 10, 2017.



Secretary of Agriculture  
Designate  
Michael L. Young



Agricultural Statistics Board  
Chairperson  
Joseph L. Parsons

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**Winter Wheat Area Harvested, Yield, and Production – States and United States: 2016 and Forecasted May 1, 2017**

State	Area harvested		Yield per acre		Production	
	2016	2017	2016	2017	2016	2017
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arkansas .....	115	110	54.0	60.0	6,210	6,600
California .....	170	150	78.0	71.0	13,260	10,650
Colorado .....	2,190	1,950	48.0	37.0	105,120	72,150
Idaho .....	710	690	94.0	85.0	66,740	58,650
Illinois .....	470	450	74.0	73.0	34,780	32,850
Indiana .....	280	240	81.0	78.0	22,680	18,720
Kansas .....	8,200	6,900	57.0	42.0	467,400	289,800
Kentucky .....	400	350	80.0	70.0	32,000	24,500
Maryland .....	260	290	64.0	65.0	16,640	18,850
Michigan .....	570	400	89.0	85.0	50,730	34,000
Mississippi .....	50	45	48.0	58.0	2,400	2,610
Missouri .....	570	480	70.0	62.0	39,900	29,760
Montana .....	2,150	1,700	49.0	48.0	105,350	81,600
Nebraska .....	1,310	1,010	54.0	51.0	70,740	51,510
North Carolina .....	355	400	41.0	51.0	14,555	20,400
North Dakota .....	120	55	48.0	52.0	5,760	2,860
Ohio .....	560	430	80.0	78.0	44,800	33,540
Oklahoma .....	3,500	2,700	39.0	33.0	136,500	89,100
Oregon .....	710	705	50.0	59.0	35,500	41,595
South Dakota .....	1,100	780	58.0	56.0	63,800	43,680
Tennessee .....	335	295	73.0	73.0	24,455	21,535
Texas .....	2,800	2,300	32.0	30.0	89,600	69,000
Virginia .....	175	135	53.0	64.0	9,275	8,640
Washington .....	1,670	1,660	78.0	67.0	130,260	111,220
Wisconsin .....	250	190	79.0	74.0	19,750	14,060
Other States <sup>1</sup> .....	1,202	1,149	52.7	50.9	63,327	58,512
United States .....	30,222	25,564	55.3	48.8	1,671,532	1,246,392

<sup>1</sup> Other States include Alabama, Arizona, Delaware, Florida, Georgia, Iowa, Louisiana, Minnesota, Nevada, New Jersey, New Mexico, New York, Pennsylvania, South Carolina, Utah, West Virginia, and Wyoming. Individual State level estimates will be published in the *Small Grains 2017 Summary* report.

## Durum Wheat Area Harvested, Yield, and Production – States and United States: 2016 and Forecasted May 1, 2017

[Blank data cells indicate estimation period has not yet begun. Area harvested for the United States and remaining States will be published in *Acreage* released June 2017. Yield and production will be published in *Crop Production* released July 2017]

State	Area harvested		Yield per acre		Production	
	2016	2017	2016	2017	2016	2017
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arizona .....	96	102	98.0	100.0	9,408	10,200
California .....	47	35	86.0	80.0	4,042	2,800
Montana .....	765		41.0		31,365	
North Dakota .....	1,440		40.5		58,320	
Other States <sup>1</sup> .....	17		57.7		981	
United States .....	2,365		44.0		104,116	

<sup>1</sup> Other States include Idaho and South Dakota. Individual State level estimates will be published in the *Small Grains 2017 Summary*.

## Wheat Production by Class – United States: 2016 and Forecasted May 1, 2017

[Blank data cells indicate estimation period has not yet begun. 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	2016	2017
	(1,000 bushels)	(1,000 bushels)
<b>Winter</b>		
Hard red .....	1,081,690	737,458
Soft red .....	345,230	296,669
Hard white .....	25,476	16,834
Soft white .....	219,136	195,431
<b>Spring</b>		
Hard red .....	493,125	
Hard white .....	7,539	
Soft white .....	33,363	
Durum .....	104,116	
<b>Total</b> .....	2,309,675	

## Hay Stocks on Farms – States and United States: December 1 and May 1, 2015-2017

State	December 1		May 1	
	2015 (1,000 tons)	2016 (1,000 tons)	2016 (1,000 tons)	2017 (1,000 tons)
Alabama .....	1,600	1,050	265	240
Arizona .....	310	300	55	30
Arkansas .....	1,750	1,950	530	600
California .....	1,900	1,800	340	330
Colorado .....	1,900	1,650	800	500
Connecticut .....	45	47	4	9
Delaware .....	20	25	2	3
Florida .....	560	550	55	40
Georgia .....	1,100	950	195	165
Idaho .....	2,500	2,600	950	510
Illinois .....	1,120	1,100	300	300
Indiana .....	760	960	185	310
Iowa .....	3,280	2,650	620	630
Kansas .....	5,100	5,300	1,350	1,250
Kentucky .....	4,150	3,950	800	1,090
Louisiana .....	620	780	150	200
Maine .....	139	142	26	22
Maryland .....	370	360	78	100
Massachusetts .....	56	55	14	16
Michigan .....	1,800	1,320	440	375
Minnesota .....	3,150	3,200	770	860
Mississippi .....	950	900	145	160
Missouri .....	5,600	5,350	1,585	1,500
Montana .....	3,700	4,100	1,025	870
Nebraska .....	5,100	4,600	1,450	1,300
Nevada .....	550	600	215	220
New Hampshire .....	42	31	6	6
New Jersey .....	80	123	20	26
New Mexico .....	400	400	115	90
New York .....	1,265	1,390	189	325
North Carolina .....	1,120	1,200	260	260
North Dakota .....	5,100	4,700	1,450	1,090
Ohio .....	1,490	1,340	355	415
Oklahoma .....	5,450	5,700	1,450	1,500
Oregon .....	2,000	2,300	440	270
Pennsylvania .....	2,100	2,200	390	520
Rhode Island .....	6	4	1	1
South Carolina .....	360	380	75	80
South Dakota .....	6,600	6,000	2,200	1,850
Tennessee .....	3,100	3,050	550	480
Texas .....	8,000	10,000	2,500	3,280
Utah .....	1,150	1,200	410	300
Vermont .....	150	260	35	40
Virginia .....	2,000	2,300	420	540
Washington .....	1,400	1,500	400	330
West Virginia .....	850	870	190	175
Wisconsin .....	2,900	3,200	810	820
Wyoming .....	1,300	1,400	525	360
United States .....	94,993	95,837	25,140	24,388

**Spring Potato Area Planted, Harvested, Yield, and Production – States and United States: 2016 and Forecasted May 1, 2017**

State	Area planted		Area harvested		Yield per acre		Production	
	2016 (1,000 acres)	2017 (1,000 acres)	2016 (1,000 acres)	2017 (1,000 acres)	2016 (cwt)	2017 (cwt)	2016 (1,000 cwt)	2017 (1,000 cwt)
California .....	26.0	28.0	25.1	27.5	390	425	9,789	11,688
Florida .....	25.0	26.0	22.9	25.2	235	240	5,382	6,048
United States .....	51.0	54.0	48.0	52.7	316	337	15,171	17,736

## Utilized Production of Citrus Fruits by Crop – States and United States: 2015-2016 and Forecasted May 1, 2017

[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 <sup>1</sup>		Utilized production ton equivalent <sup>2</sup>	
	2015-2016 (1,000 boxes)	2016-2017 (1,000 boxes)	2015-2016 (1,000 tons)	2016-2017 (1,000 tons)
<b>Oranges</b>				
California, all <sup>3</sup> .....	58,500	51,000	2,340	2,040
Early, mid, and Navel <sup>4</sup> .....	47,200	43,000	1,888	1,720
Valencia .....	11,300	8,000	452	320
Florida, all .....	81,700	68,000	3,677	3,060
Early, mid, and Navel <sup>4</sup> .....	36,100	33,000	1,625	1,485
Valencia .....	45,600	35,000	2,052	1,575
Texas, all <sup>3</sup> .....	1,691	1,370	71	59
Early, mid, and Navel <sup>4</sup> .....	1,351	1,050	57	45
Valencia .....	340	320	14	14
United States, all .....	141,891	120,370	6,088	5,159
Early, mid, and Navel <sup>4</sup> .....	84,651	77,050	3,570	3,250
Valencia .....	57,240	43,320	2,518	1,909
<b>Grapefruit</b>				
California <sup>3</sup> .....	3,800	3,800	152	152
Florida, all .....	10,800	7,800	459	332
Red .....	8,310	6,300	353	268
White .....	2,490	1,500	106	64
Texas <sup>3</sup> .....	4,800	4,700	192	188
United States .....	19,400	16,300	803	672
<b>Tangerines and mandarins <sup>5</sup></b>				
California <sup>3</sup> .....	21,600	22,000	864	880
Florida <sup>6</sup> .....	1,415	1,630	67	77
United States .....	23,015	23,630	931	957
<b>Lemons <sup>3</sup></b>				
Arizona .....	1,750	1,700	70	68
California .....	20,900	19,000	836	760
United States .....	22,650	20,700	906	828
<b>Tangelos <sup>7</sup></b>				
Florida .....	390	(NA)	18	(NA)

(NA) Not available.

<sup>1</sup> 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; tangelos-90.

<sup>2</sup> Totals may not add due to rounding.

<sup>3</sup> Estimates for current year carried forward from previous forecast.

<sup>4</sup> Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas. For 2015-2016 included small quantities of Temples in Florida. Beginning in 2016-2017 Temples included in tangerines and mandarins.

<sup>5</sup> Includes tangelos and tangors.

<sup>6</sup> Small quantities of Temples in Florida.

<sup>7</sup> Beginning in 2016-2017, tangelos are included in tangerines and mandarins for Florida.

**Peach Production by Type – California: 2016 and Forecasted May 1, 2017**

Type	Total production	
	2016	2017
	(tons)	(tons)
Freestone .....	260,000	295,000
Clingstone .....	320,000	330,000
Total .....	580,000	625,000

**Almonds Utilized Production – California: 2016 and Forecasted May 1, 2017**

State	Utilized production (shelled basis)	
	2016	2017
	(1,000 pounds)	(1,000 pounds)
California .....	2,140,000	2,200,000

**Cotton Area Planted, Harvested, and Yield by Type – States and United States: 2015 and 2016**

Type and State	Area planted		Area harvested		Yield per acre	
	2015 (1,000 acres)	2016 (1,000 acres)	2015 (1,000 acres)	2016 (1,000 acres)	2015 (pounds)	2016 (pounds)
<b>Upland</b>						
Alabama .....	315.0	345.0	307.0	343.0	866	988
Arizona .....	89.0	120.0	88.0	118.0	1,511	1,525
Arkansas .....	210.0	380.0	207.0	375.0	1,092	1,075
California .....	47.0	63.0	46.0	62.0	1,722	1,897
Florida .....	85.0	103.0	83.0	102.0	885	922
Georgia .....	1,130.0	1,180.0	1,120.0	1,165.0	966	898
Kansas .....	16.0	32.0	16.0	31.0	1,050	1,099
Louisiana .....	115.0	140.0	112.0	137.0	810	939
Mississippi .....	320.0	435.0	315.0	430.0	1,024	1,207
Missouri .....	185.0	280.0	175.0	266.0	1,097	1,021
New Mexico .....	35.0	47.0	31.0	41.0	929	1,030
North Carolina .....	385.0	280.0	355.0	255.0	713	646
Oklahoma .....	215.0	305.0	205.0	290.0	876	1,021
South Carolina .....	235.0	190.0	136.0	183.0	547	656
Tennessee .....	155.0	255.0	140.0	250.0	1,046	1,104
Texas .....	4,800.0	5,650.0	4,500.0	5,200.0	610	748
Virginia .....	85.0	73.0	84.0	72.0	817	667
United States .....	8,422.0	9,878.0	7,920.0	9,320.0	755	855
<b>American Pima</b>						
Arizona .....	17.5	14.5	17.0	11.0	875	851
California .....	117.0	155.0	116.0	154.0	1,494	1,565
New Mexico .....	7.0	8.0	6.9	7.8	904	886
Texas .....	17.0	17.0	15.0	15.0	896	1,056
United States .....	158.5	194.5	154.9	187.8	1,342	1,454
<b>All</b>						
Alabama .....	315.0	345.0	307.0	343.0	866	988
Arizona .....	106.5	134.5	105.0	129.0	1,408	1,468
Arkansas .....	210.0	380.0	207.0	375.0	1,092	1,075
California .....	164.0	218.0	162.0	216.0	1,559	1,660
Florida .....	85.0	103.0	83.0	102.0	885	922
Georgia .....	1,130.0	1,180.0	1,120.0	1,165.0	966	898
Kansas .....	16.0	32.0	16.0	31.0	1,050	1,099
Louisiana .....	115.0	140.0	112.0	137.0	810	939
Mississippi .....	320.0	435.0	315.0	430.0	1,024	1,207
Missouri .....	185.0	280.0	175.0	266.0	1,097	1,021
New Mexico .....	42.0	55.0	37.9	48.8	925	1,007
North Carolina .....	385.0	280.0	355.0	255.0	713	646
Oklahoma .....	215.0	305.0	205.0	290.0	876	1,021
South Carolina .....	235.0	190.0	136.0	183.0	547	656
Tennessee .....	155.0	255.0	140.0	250.0	1,046	1,104
Texas .....	4,817.0	5,667.0	4,515.0	5,215.0	611	749
Virginia .....	85.0	73.0	84.0	72.0	817	667
United States .....	8,580.5	10,072.5	8,074.9	9,507.8	766	867

## Cotton Production and Bales Ginned by Type – States and United States: 2015 and 2016

Type and State	Production in 480-pound net weight bales <sup>1</sup>		Lint seed ratio <sup>2</sup>		Bales ginned in 480-pound net weight bales <sup>3</sup>	
	2015	2016	2015	2016	2015	2016
	(1,000 bales)	(1,000 bales)	(ratio)	(ratio)	(bales)	(bales)
<b>Upland</b>						
Alabama .....	554.0	706.0	(NA)	(NA)	545,500	691,600
Arizona .....	277.0	375.0	(NA)	(NA)	267,750	365,750
Arkansas .....	471.0	840.0	(NA)	(NA)	491,050	873,150
California .....	165.0	245.0	(NA)	(NA)	175,250	258,600
Florida .....	153.0	196.0	(NA)	(NA)	113,950	150,300
Georgia .....	2,255.0	2,180.0	(NA)	(NA)	2,294,300	2,229,750
Kansas .....	35.0	71.0	(NA)	(NA)	37,800	73,200
Louisiana .....	189.0	268.0	(NA)	(NA)	196,850	270,650
Mississippi .....	672.0	1,081.0	(NA)	(NA)	629,150	1,032,100
Missouri .....	400.0	566.0	(NA)	(NA)	414,050	576,650
New Mexico .....	60.0	88.0	(NA)	(NA)	19,200	33,900
North Carolina .....	527.0	343.0	(NA)	(NA)	540,750	367,600
Oklahoma .....	374.0	617.0	(NA)	(NA)	350,650	576,250
South Carolina .....	155.0	250.0	(NA)	(NA)	142,850	224,250
Tennessee .....	305.0	575.0	(NA)	(NA)	308,000	579,950
Texas .....	5,720.0	8,100.0	(NA)	(NA)	5,771,000	8,174,000
Virginia .....	143.0	100.0	(NA)	(NA)	136,000	94,650
United States .....	12,455.0	16,601.0	(NA)	(NA)	12,434,100	16,572,350
<b>American Pima</b>						
Arizona .....	31.0	19.5	(NA)	(NA)	31,300	20,600
California .....	361.0	502.0	(NA)	(NA)	360,650	500,500
New Mexico .....	13.0	14.4	(NA)	(NA)	14,600	15,550
Texas .....	28.0	33.0	(NA)	(NA)	26,000	31,400
United States .....	433.0	568.9	(NA)	(NA)	432,550	568,050
<b>All</b>						
Alabama .....	554.0	706.0	(NA)	(NA)	545,500	691,600
Arizona .....	308.0	394.5	(NA)	(NA)	299,050	386,350
Arkansas .....	471.0	840.0	0.419	0.422	491,050	873,150
California .....	526.0	747.0	(NA)	(NA)	535,900	759,100
Florida .....	153.0	196.0	(NA)	(NA)	113,950	150,300
Georgia .....	2,255.0	2,180.0	0.468	0.459	2,294,300	2,229,750
Kansas .....	35.0	71.0	(NA)	(NA)	37,800	73,200
Louisiana .....	189.0	268.0	0.425	0.426	196,850	270,650
Mississippi .....	672.0	1,081.0	0.429	0.427	629,150	1,032,100
Missouri .....	400.0	566.0	(NA)	(NA)	414,050	576,650
New Mexico .....	73.0	102.4	(NA)	(NA)	33,800	49,450
North Carolina .....	527.0	343.0	0.448	0.453	540,750	367,600
Oklahoma .....	374.0	617.0	(NA)	(NA)	350,650	576,250
South Carolina .....	155.0	250.0	(NA)	(NA)	142,850	224,250
Tennessee .....	305.0	575.0	(NA)	(NA)	308,000	579,950
Texas .....	5,748.0	8,133.0	0.428	0.435	5,797,000	8,205,400
Virginia .....	143.0	100.0	(NA)	(NA)	136,000	94,650
United States .....	12,888.0	17,169.9	(NA)	(NA)	12,866,650	17,140,400

(NA) Not available.

<sup>1</sup> Production ginned and to be ginned.

<sup>2</sup> Estimates available only for the 6 States shown.

<sup>3</sup> Equivalent 480-pound net weight bales ginned, not adjusted for cross-state movement.

## Cottonseed Production and Farm Disposition – States and United States: 2015 and 2016

State	Production		Farm disposition				Seed for planting <sup>2</sup>	
			Sales to oil mills		Other <sup>1</sup>			
	2015	2016	2015	2016	2015	2016	2015	2016
	(1,000 tons)	(1,000 tons)	(1,000 tons)	(1,000 tons)	(1,000 tons)	(1,000 tons)	(1,000 tons)	(1,000 tons)
Alabama .....	162.0	207.0	22.0	44.0	140.0	163.0	1.8	2.5
Arizona .....	98.0	138.0	-	-	98.0	138.0	0.9	1.2
Arkansas .....	156.0	275.0	106.0	204.0	50.0	71.0	1.8	3.3
California .....	199.0	281.0	31.0	58.0	168.0	223.0	1.6	2.1
Florida .....	41.0	55.0	31.0	48.0	10.0	7.0	0.4	0.4
Georgia .....	615.0	616.0	266.0	295.0	349.0	321.0	5.6	6.7
Kansas .....	11.0	23.0	-	-	11.0	23.0	0.1	0.3
Louisiana .....	61.0	86.0	47.0	73.0	14.0	13.0	1.0	1.2
Mississippi .....	215.0	348.0	122.0	257.0	93.0	91.0	2.9	3.6
Missouri .....	154.0	198.0	102.0	150.0	52.0	48.0	1.5	1.6
New Mexico .....	24.0	33.0	-	-	24.0	33.0	0.3	0.4
North Carolina .....	156.0	99.0	28.0	13.0	128.0	86.0	1.9	2.3
Oklahoma .....	121.0	192.0	84.0	125.0	37.0	67.0	1.5	2.6
South Carolina .....	43.0	71.0	17.0	28.0	26.0	43.0	1.1	1.3
Tennessee .....	105.0	191.0	89.0	169.0	16.0	22.0	1.5	2.0
Texas .....	1,844.0	2,528.0	964.0	1,457.0	880.0	1,071.0	29.3	38.7
Virginia .....	38.0	28.0	7.0	-	31.0	28.0	0.5	0.5
United States .....	4,043.0	5,369.0	1,916.0	2,921.0	2,127.0	2,448.0	53.7	70.7

- Represents zero.

<sup>1</sup> Includes planting seed, feed, exports, inter-farm sales, shrinkage, losses, and other uses.

<sup>2</sup> Included in "other" farm disposition. Seed for planting is produced in crop year shown, but used in the following year.

## Cotton Objective Yield Data

The National Agricultural Statistics Service conducted objective yield surveys in six cotton-producing States during 2016. Randomly selected plots in cotton fields were visited monthly from August through harvest to obtain specific counts and measurements. Data in this table are actual field counts from this survey.

## Cotton Harvest Loss per Acre – Selected States: 2012-2016

State	2012	2013	2014	2015	2016
	(pounds)	(pounds)	(pounds)	(pounds)	(pounds)
Arkansas .....	110	125	176	69	131
Georgia .....	158	158	184	197	138
Louisiana .....	212	152	149	83	102
Mississippi .....	110	128	103	80	100
North Carolina .....	119	99	109	163	123
Texas .....	41	68	43	36	53
6 State .....	85	100	85	74	76

## Cotton Cumulative Boll Counts – Selected States: 2012-2016

[Includes small bolls (less than one inch in diameter), large unopened bolls (at least one inch in diameter), open bolls, partially opened bolls, and burrs per 40 feet of row. November, December, and Final exclude small bolls]

State and month	2012 (number)	2013 (number)	2014 (number)	2015 (number)	2016 (number)
<b>Arkansas</b>					
September .....	841	1,025	910	763	800
October .....	852	(NA)	741	769	769
November .....	856	855	771	856	779
December .....	856	862	773	856	779
Final .....	856	862	773	856	779
<b>Georgia</b>					
September .....	656	481	660	645	562
October .....	646	(NA)	660	630	668
November .....	756	663	717	748	719
December .....	768	669	718	759	725
Final .....	768	670	719	759	725
<b>Louisiana</b>					
September .....	855	806	745	676	654
October .....	880	(NA)	876	776	760
November .....	900	857	877	794	784
December .....	900	857	877	793	784
Final .....	900	857	877	793	784
<b>Mississippi</b>					
September .....	883	925	843	887	953
October .....	855	(NA)	808	839	942
November .....	896	906	861	898	974
December .....	896	907	861	898	974
Final .....	892	907	861	898	974
<b>North Carolina</b>					
September .....	727	532	604	551	558
October .....	739	(NA)	629	620	599
November .....	865	636	765	624	660
December .....	872	668	764	632	660
Final .....	872	668	764	632	660
<b>Texas</b>					
September .....	535	547	485	566	467
October .....	443	(NA)	373	442	474
November .....	522	517	453	481	528
December .....	549	526	461	492	547
Final .....	552	525	482	495	546
<b>6-State</b>					
September .....	619	580	564	601	532
October .....	562	(NA)	487	518	554
November .....	640	608	561	571	604
December .....	659	614	566	581	618
Final .....	679	617	587	583	618

(NA) Not available.

## Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2016 and 2017

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2017 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Area planted		Area harvested	
	2016	2017	2016	2017
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
<b>Grains and hay</b>				
Barley .....	3,052	2,548	2,558	
Corn for grain <sup>1</sup> .....	94,004	89,996	86,748	
Corn for silage .....	(NA)		6,186	
Hay, all .....	(NA)	(NA)	53,461	52,811
Alfalfa .....	(NA)		16,885	
All other .....	(NA)		36,576	
Oats .....	2,828	2,699	981	
Proso millet .....	443		413	
Rice .....	3,150	2,626	3,097	
Rye .....	1,891		414	
Sorghum for grain <sup>1</sup> .....	6,690	5,757	6,163	
Sorghum for silage .....	(NA)		298	
Wheat, all .....	50,154	46,059	43,890	
Winter .....	36,137	32,747	30,222	25,564
Durum .....	2,412	2,004	2,365	
Other spring .....	11,605	11,308	11,303	
<b>Oilseeds</b>				
Canola .....	1,714.0	1,927.0	1,685.7	
Cottonseed .....	(X)		(X)	
Flaxseed .....	374	313	367	
Mustard seed .....	103.1		98.2	
Peanuts .....	1,671.0	1,751.0	1,547.0	
Rapeseed .....	11.0		10.5	
Safflower .....	161.1		154.4	
Soybeans for beans .....	83,433	89,482	82,736	
Sunflower .....	1,596.6	1,454.0	1,534.0	
<b>Cotton, tobacco, and sugar crops</b>				
Cotton, all .....	10,072.5	12,233.0	9,507.8	
Upland .....	9,878.0	12,001.0	9,320.0	
American Pima .....	194.5	232.0	187.8	
Sugarbeets .....	1,163.4	1,134.8	1,126.2	
Sugarcane .....	(NA)		903.1	
Tobacco .....	(NA)	(NA)	319.7	318.0
<b>Dry beans, peas, and lentils</b>				
Austrian winter peas .....	38.0	26.0	28.0	
Dry edible beans .....	1,662.0	1,866.0	1,558.6	
Chickpeas, all .....	325.3	498.0	320.0	
Large .....	211.5	343.0	209.2	
Small .....	113.8	155.0	110.8	
Dry edible peas .....	1,382.0	1,141.0	1,329.8	
Lentils .....	933.0	1,055.0	908.0	
Wrinkled seed peas .....	(NA)		(NA)	
<b>Potatoes and miscellaneous</b>				
Hops .....	(NA)		50.9	
Maple syrup .....	(NA)		(NA)	
Mushrooms .....	(NA)		(NA)	
Peppermint oil .....	(NA)		65.3	
Potatoes, all .....	1,034.0		1,007.7	
Spring .....	51.0	54.0	48.0	52.7
Summer .....	62.2		60.7	
Fall .....	920.8		899.0	
Spearmint oil .....	(NA)		24.5	
Sweet potatoes .....	168.1	158.4	163.3	
Taro (Hawaii) .....	(NA)		(D)	

See footnote(s) at end of table.

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**Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States:  
2016 and 2017 (continued)**

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2017 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Yield per acre		Production	
	2016	2017	2016 (1,000)	2017 (1,000)
<b>Grains and hay</b>				
Barley .....	bushels	77.9	199,282	
Corn for grain .....	bushels	174.6	15,148,038	
Corn for silage .....	tons	20.3	125,670	
Hay, all .....	tons	2.52	134,781	
Alfalfa .....	tons	3.45	58,263	
All other .....	tons	2.09	76,518	
Oats .....	bushels	66.0	64,770	
Proso millet .....	bushels	30.4	12,558	
Rice <sup>2</sup> .....	cwt	7,237	224,145	
Rye .....	bushels	32.5	13,451	
Sorghum for grain .....	bushels	77.9	480,261	
Sorghum for silage .....	tons	14.0	4,171	
Wheat, all .....	bushels	52.6	2,309,675	
Winter .....	bushels	55.3	1,671,532	1,246,392
Durum .....	bushels	44.0	104,116	
Other spring .....	bushels	47.2	534,027	
<b>Oilseeds</b>				
Canola .....	pounds	1,824	3,075,200	
Cottonseed .....	tons	(X)	5,369.0	
Flaxseed .....	bushels	23.7	8,680	
Mustard seed .....	pounds	980	96,270	
Peanuts .....	pounds	3,675	5,684,610	
Rapeseed .....	pounds	1,840	19,320	
Safflower .....	pounds	1,425	220,090	
Soybeans for beans .....	bushels	52.1	4,306,671	
Sunflower .....	pounds	1,731	2,654,735	
<b>Cotton, tobacco, and sugar crops</b>				
Cotton, all <sup>2</sup> .....	bales	867	17,169.9	
Upland <sup>2</sup> .....	bales	855	16,601.0	
American Pima <sup>2</sup> .....	bales	1,454	568.9	
Sugarbeets .....	tons	32.7	36,881	
Sugarcane .....	tons	35.6	32,118	
Tobacco .....	pounds	1,967	628,720	
<b>Dry beans, peas, and lentils</b>				
Austrian winter peas <sup>2</sup> .....	cwt	1,704	477	
Dry edible beans <sup>2</sup> .....	cwt	1,842	28,712	
Chickpeas, all <sup>2</sup> .....	cwt	1,702	5,447	
Large <sup>2</sup> .....	cwt	1,677	3,509	
Small <sup>2</sup> .....	cwt	1,749	1,938	
Dry edible peas <sup>2</sup> .....	cwt	2,086	27,737	
Lentils <sup>2</sup> .....	cwt	1,397	12,685	
Wrinkled seed peas .....	cwt	(NA)	439	
<b>Potatoes and miscellaneous</b>				
Hops .....	pounds	1,713	87,139.6	
Maple syrup .....	gallons	(NA)	4,207	
Mushrooms .....	pounds	(NA)	945,639	
Peppermint oil .....	pounds	89	5,800	
Potatoes, all .....	cwt	437	440,725	
Spring .....	cwt	316	15,171	17,736
Summer .....	cwt	323	19,602	
Fall .....	cwt	452	405,952	
Spearmint oil .....	pounds	131	3,208	
Sweet potatoes .....	cwt	193	31,546	
Taro (Hawaii) .....	pounds	(D)	(D)	

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

(NA) Not available.

(X) Not applicable.

<sup>1</sup> Area planted for all purposes.

<sup>2</sup> Yield in pounds.

## Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2016 and 2017

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2017 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Area planted		Area harvested	
	2016	2017	2016	2017
	(hectares)	(hectares)	(hectares)	(hectares)
<b>Grains and hay</b>				
Barley .....	1,235,110	1,031,150	1,035,200	
Corn for grain <sup>1</sup> .....	38,042,480	36,420,480	35,106,050	
Corn for silage .....	(NA)		2,503,410	
Hay, all <sup>2</sup> .....	(NA)	(NA)	21,635,130	21,372,080
Alfalfa .....	(NA)		6,833,190	
All other .....	(NA)		14,801,940	
Oats .....	1,144,460	1,092,260	397,000	
Proso millet .....	179,280		167,140	
Rice .....	1,274,770	1,062,720	1,253,320	
Rye .....	765,270		167,540	
Sorghum for grain <sup>1</sup> .....	2,707,380	2,329,800	2,494,100	
Sorghum for silage .....	(NA)		120,600	
Wheat, all <sup>2</sup> .....	20,296,820	18,639,620	17,761,840	10,345,500
Winter .....	14,624,280	13,252,380	12,230,540	
Durum .....	976,110	811,000	957,090	
Other spring .....	4,696,430	4,576,230	4,574,210	
<b>Oilseeds</b>				
Canola .....	693,640	779,840	682,190	
Cottonseed .....	(X)		(X)	
Flaxseed .....	151,350	126,670	148,520	
Mustard seed .....	41,720		39,740	
Peanuts .....	676,240	708,610	626,060	
Rapeseed .....	4,450		4,250	
Safflower .....	65,200		62,480	
Soybeans for beans .....	33,764,500	36,212,470	33,482,430	
Sunflower .....	646,130	588,420	620,790	
<b>Cotton, tobacco, and sugar crops</b>				
Cotton, all <sup>2</sup> .....	4,076,240	4,950,570	3,847,710	
Upland .....	3,997,530	4,856,680	3,771,710	
American Pima .....	78,710	93,890	76,000	
Sugarbeets .....	470,820	459,240	455,760	
Sugarcane .....	(NA)		365,480	
Tobacco .....	(NA)	(NA)	129,360	128,690
<b>Dry beans, peas, and lentils</b>				
Austrian winter peas .....	15,380	10,520	11,330	
Dry edible beans .....	672,590	755,150	630,750	
Chickpeas <sup>2</sup> .....	131,650	201,540	129,500	
Large .....	85,590	138,810	84,660	
Small .....	46,050	62,730	44,840	
Dry edible peas .....	559,280	461,750	538,160	
Lentils .....	377,580	426,950	367,460	
Wrinkled seed peas .....	(NA)		(NA)	
<b>Potatoes and miscellaneous</b>				
Hops .....	(NA)		20,580	
Maple syrup .....	(NA)		(NA)	
Mushrooms .....	(NA)		(NA)	
Peppermint oil .....	(NA)		26,430	
Potatoes, all <sup>2</sup> .....	418,450		407,810	
Spring .....	20,640	21,850	19,430	21,330
Summer .....	25,170		24,560	
Fall .....	372,640		363,820	
Spearmint oil .....	(NA)		9,910	
Sweet potatoes .....	68,030	64,100	66,090	
Taro (Hawaii) .....	(NA)		(D)	

See footnote(s) at end of table.

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**Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2016 and 2017 (continued)**

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2017 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Yield per hectare		Production	
	2016	2017	2016	2017
	(metric tons)	(metric tons)	(metric tons)	(metric tons)
<b>Grains and hay</b>				
Barley .....	4.19		4,338,850	
Corn for grain .....	10.96		384,777,890	
Corn for silage .....	45.54		114,005,910	
Hay, all <sup>2</sup> .....	5.65		122,271,270	
Alfalfa .....	7.74		52,855,300	
All other .....	4.69		69,415,960	
Oats .....	2.37		940,130	
Proso millet .....	1.70		284,810	
Rice .....	8.11		10,167,050	
Rye .....	2.04		341,670	
Sorghum for grain .....	4.89		12,199,190	
Sorghum for silage .....	31.38		3,783,870	
Wheat, all <sup>2</sup> .....	3.54		62,859,050	
Winter .....	3.72	3.28	45,491,650	33,921,230
Durum .....	2.96		2,833,570	
Other spring .....	3.18		14,533,830	
<b>Oilseeds</b>				
Canola .....	2.04		1,394,890	
Cottonseed .....	(X)		4,870,670	
Flaxseed .....	1.48		220,480	
Mustard seed .....	1.10		43,670	
Peanuts .....	4.12		2,578,500	
Rapeseed .....	2.06		8,760	
Safflower .....	1.60		99,830	
Soybeans for beans .....	3.50		117,208,380	
Sunflower .....	1.94		1,204,170	
<b>Cotton, tobacco, and sugar crops</b>				
Cotton, all <sup>2</sup> .....	0.97		3,738,310	
Upland .....	0.96		3,614,440	
American Pima .....	1.63		123,860	
Sugarbeets .....	73.41		33,457,880	
Sugarcane .....	79.72		29,136,960	
Tobacco .....	2.20		285,180	
<b>Dry beans, peas, and lentils</b>				
Austrian winter peas .....	1.91		21,640	
Dry edible beans .....	2.06		1,302,350	
Chickpeas, all <sup>2</sup> .....	1.91		247,070	
Large .....	1.88		159,170	
Small .....	1.96		87,910	
Dry edible peas .....	2.34		1,258,130	
Lentils .....	1.57		575,380	
Wrinkled seed peas .....	(NA)		19,910	
<b>Potatoes and miscellaneous</b>				
Hops .....	1.92		39,530	
Maple syrup .....	(NA)		21,040	
Mushrooms .....	(NA)		428,930	
Peppermint oil .....	0.10		2,630	
Potatoes, all <sup>2</sup> .....	49.02		19,990,950	
Spring .....	35.43	37.72	688,150	804,490
Summer .....	36.20		889,130	
Fall .....	50.61		18,413,670	
Spearmint oil .....	0.15		1,460	
Sweet potatoes .....	21.65		1,430,900	
Taro (Hawaii) .....	(D)		(D)	

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

(NA) Not available.

(X) Not applicable.

<sup>1</sup> Area planted for all purposes.

<sup>2</sup> Total may not add due to rounding.

## Fruits and Nuts Production in Domestic Units – United States: 2016 and 2017

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2017 crop year, except citrus which is for the 2016-2017 season. Blank data cells indicate estimation period has not yet begun]

Crop	Production	
	2016	2017
<b>Citrus <sup>1</sup></b>		
Grapefruit .....1,000 tons	803	672
Lemons .....1,000 tons	906	828
Oranges .....1,000 tons	6,088	5,159
Tangelos (Florida) <sup>2</sup> .....1,000 tons	18	(NA)
Tangerines and mandarins .....1,000 tons	931	957
<b>Noncitrus</b>		
Apples .....million pounds	10,417.0	
Apricots ..... tons	61,400	
Avocados ..... tons		
Bananas (Hawaii) .....1,000 pounds		
Blackberries (Oregon) .....1,000 pounds		
Blueberries		
Cultivated .....1,000 pounds		
Wild (Maine) .....1,000 pounds		
Boysenberries (Oregon) .....1,000 pounds		
Raspberries, All .....1,000 pounds		
Cherries, Sweet ..... tons	318,000	
Cherries, Tart .....million pounds	309.1	
Coffee .....1,000 pounds	38,640	
Cranberries ..... barrel	8,591,700	
Dates (California) ..... tons		
Figs (California) ..... tons		
Grapes ..... tons	7,823,900	
Kiwifruit (California) ..... tons		
Nectarines ..... tons		
Olives (California) ..... tons		
Papayas (Hawaii) .....1,000 pounds		
Peaches ..... tons	806,600	
Pears ..... tons	782,000	
Plums (California) ..... tons		
Prunes (California) ..... tons	45,000	
Strawberries .....1,000 cwt	31,321	
<b>Nuts and miscellaneous</b>		
Almonds, shelled (California) .....1,000 pounds	2,140,000	2,200,000
Hazelnuts, in-shell (Oregon) ..... tons	38,000	
Macadamias (Hawaii) .....1,000 pounds		
Pecans, in-shell .....1,000 pounds	262,700	
Pistachios (California) .....1,000 pounds		
Walnuts, in-shell (California) ..... tons	670,000	

(NA) Not available.

<sup>1</sup> Production years are 2015-2016 and 2016-2017.

<sup>2</sup> Beginning in 2016-2017, tangelos are included in tangerines and mandarins for Florida.

## Fruits and Nuts Production in Metric Units – United States: 2016 and 2017

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2017 crop year, except citrus which is for the 2016-2017 season. Blank data cells indicate estimation period has not yet begun]

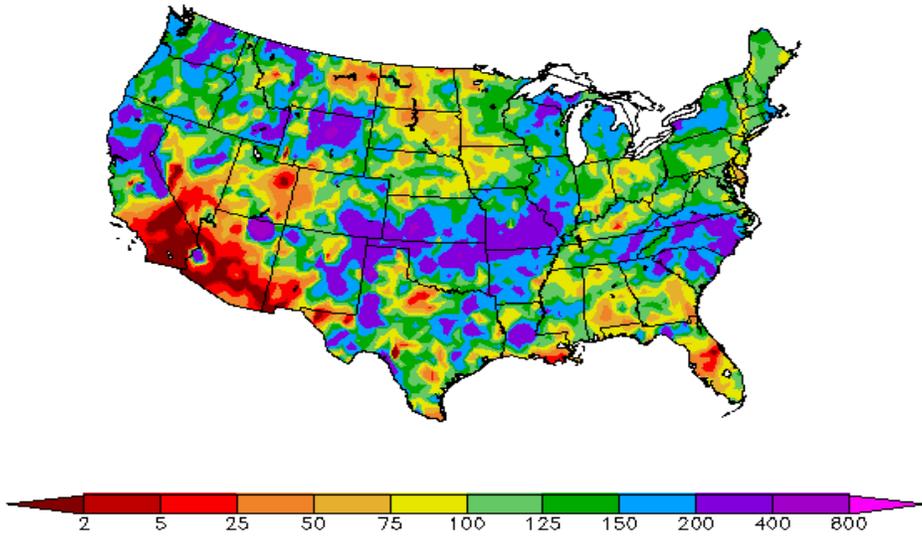
Crop	Production	
	2016 (metric tons)	2017 (metric tons)
<b>Citrus<sup>1</sup></b>		
Grapefruit .....	728,470	609,630
Lemons .....	821,910	751,150
Oranges .....	5,522,940	4,680,170
Tangelos (Florida) <sup>2</sup> .....	16,330	(NA)
Tangerines and mandarins .....	844,590	868,180
<b>Noncitrus</b>		
Apples .....	4,725,070	
Apricots .....	55,700	
Avocados .....		
Bananas (Hawaii) .....		
Blackberries (Oregon) .....		
Blueberries		
Cultivated .....		
Wild (Maine) .....		
Boysenberries (Oregon) .....		
Raspberries, All .....		
Cherries, Sweet .....	288,480	
Cherries, Tart .....	140,210	
Coffee .....	17,530	
Cranberries .....	389,710	
Dates (California) .....		
Figs (California) .....		
Grapes .....	7,097,720	
Kiwifruit (California) .....		
Nectarines .....		
Olives (California) .....		
Papayas (Hawaii) .....		
Peaches .....	731,740	
Pears .....	709,420	
Plums (California) .....		
Prunes (California) .....	40,820	
Strawberries .....	1,420,690	
<b>Nuts and miscellaneous</b>		
Almonds, shelled (California) .....	970,690	997,900
Hazelnuts, in-shell (Oregon) .....	34,470	
Macadamias (Hawaii) .....		
Pecans, in-shell .....	119,160	
Pistachios (California) .....		
Walnuts, in-shell (California) .....	607,810	

(NA) Not available.

<sup>1</sup> Production years are 2015-2016 and 2016-2017.

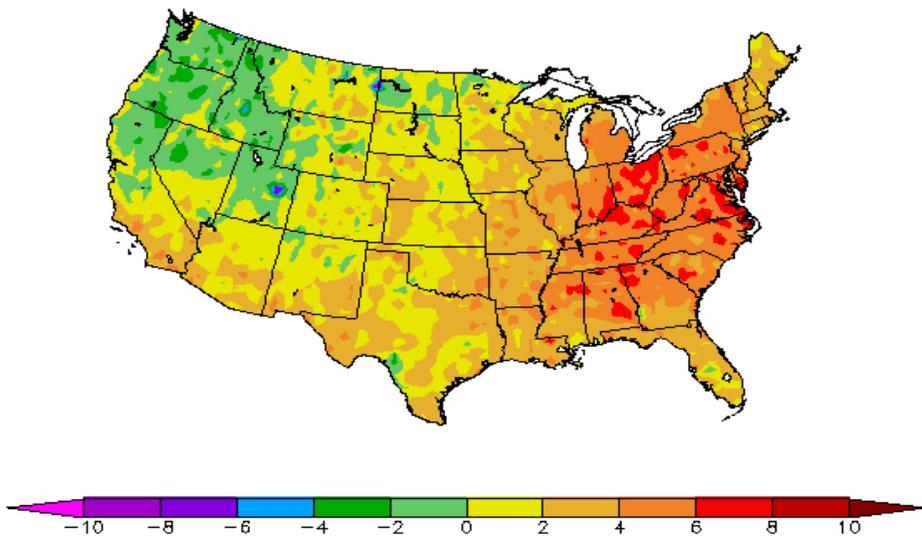
<sup>2</sup> Beginning in 2016-2017, tangelos are included in tangerines and mandarins for Florida.

Percent of Normal Precipitation (%)  
4/1/2017 - 4/30/2017



Regional Climate Centers

Departure from Normal Temperature (F)  
4/1/2017 - 4/30/2017



Regional Climate Centers

## April Weather Summary

Unsettled April weather reduced drought coverage to a United States Drought Monitor-era record low but culminated in a late-month storm that blasted the southern High Plains with heavy snow and high winds, and triggered widespread flooding from the mid-South into the lower Midwest. Still, April rainfall generally benefited pastures and winter wheat, with the portion of the latter crop rated in good to excellent condition increasing from 51 to 54 percent between April 2 and 30.

The United States Drought Monitor showed just 4.98 percent of the Nation in drought on May 2, down from 14.2 percent on March 28. The previous record for the contiguous United States in the 18-year Drought Monitor history was 7.74 percent drought coverage on July 6, 2010. Ironically, worsening drought was noted during April across the lower Southeast, including southern Georgia and portions of Florida's peninsula, maintaining heavy agricultural irrigation demands.

Farther north and west, however, planting activities proceeded between rainfall events that, until month's end, were fairly well distributed both spatially and temporally. By April 30, planting progress was at or ahead of the respective 5-year averages for rice (73 percent complete), corn (34 percent), sorghum (27 percent), peanuts (12 percent), and soybeans (10 percent). Cotton planting, 14 percent complete by April 30, was slightly behind schedule, but significant Northern planting delays were noted due to cool, damp conditions for crops such as sugarbeets (48 percent planted, 12 percentage points behind the 5-year average); barley (32 percent planted, 21 percentage points behind); and spring wheat (31 percent planted, 15 percentage points behind).

The late-month storm curtailed planting activities in a broad area from the central and southern Plains into the mid-South and lower Midwest. At risk from the powerful storm were livestock and winter wheat due to blizzard conditions and low temperatures on the High Plains, as well as recently planted and/or newly emerged summer crops (e.g. rice, corn, cotton, and soybeans) in flooded areas of the Mississippi Valley and environs.

Near- to below-normal April temperatures dominated California, the northern Plains, and the Northwest, while warmer-than-normal weather covered the remainder of the country. April average temperatures approached or attained record-high levels east of the Mississippi River, promoting a rapid crop development pace. Still, lingering impacts from mid-March freezes were apparent in Southeastern crops such as Georgia blueberries (rated 79 percent very poor to poor on April 30) and South Carolina peaches (89 percent very poor to poor).

## April Agricultural Summary

Temperatures were above-normal across most of the United States during the month of April. Monthly average temperatures were generally more than 2°F above normal east of the Great Plains with the Ohio Valley and the majority of the Southeast averaging more than 4°F above normal. The major exception to this trend was the Northwest where April average temperatures were mostly below normal. Precipitation levels were above normal across most of the Nation with notable rainfall totals reported across the northern Pacific Coast, South Central United States, and Mid-Atlantic States for the month. Parts of lower Mississippi Valley and Washington recorded over 16 inches of precipitation during the month. In the eastern Plains, cold temperatures and measurable snowfall were reported during the last week of April.

By April 9, producers had planted 3 percent of the Nation's corn crop, slightly behind last year but equal to the 5-year average. Planting progress was at or behind the 5-year average in all estimating States except Texas. By April 16, six percent of this year's corn crop was planted, 6 percentage points behind last year and 3 percentage points behind the 5-year average. Corn producers had planted 17 percent of the 2017 crop by April 23, eleven percentage points behind last year and slightly behind the 5-year average. Favorable planting conditions in Illinois allowed producers to plant 28 percent of the intended corn acreage during the third week of the month and advance ahead of the 5-year average. Producers had planted 34 percent of this year's corn crop by April 30, nine percentage points behind last year but equal to the 5-year average. Planting progress was well ahead of historical averages in most of the eastern Corn Belt States, including Ohio at 21 percentage points ahead of the 5-year average pace. By April 30, nine percent of the Nation's corn crop was emerged, 3 percentage points behind last year but slightly ahead of the 5-year average.

By April 23, six percent of the Nation's soybean crop was planted, 3 percentage points ahead of both last year and the 5-year average. Planting was most advanced in the Delta, including Mississippi, with 60 percent planted by April 23, thirty-four percentage points ahead of the 5-year average. Nationwide, 10 percent of the soybean crop was planted by April 30, three percentage points ahead of both last year and the 5-year average. During the last week of April, favorable planting conditions in Indiana and Ohio led to double-digit advances in weekly planting progress.

Overall, 51 percent of the winter wheat crop was reported in good to excellent condition on April 2, compared with 59 percent at the same time last year. At that time, crop conditions had declined in most of the Great Plains States since autumn with decreases of more than 12 percentage points in the good to excellent categories reported in Montana and Oklahoma. Heading of the winter wheat crop advanced to 9 percent complete by April 9, five percentage points ahead of last year and 3 percentage points ahead of the 5-year average. Nationally, heading advanced 13 percentage points during the week ending April 23, as favorable weather in the southern Plains promoted a rapid crop development pace. Thirty-two percent of the winter wheat crop was at or beyond the heading stage by April 23, eight percentage points ahead of last year and 9 percentage points ahead of the 5-year average. By April 30, heading of the winter wheat crop had advanced to 42 percent complete, 2 percentage points ahead of last year and 8 percentage points ahead of the 5-year average. Heading progress advanced at least 20 percentage points in Illinois, Missouri, and North Carolina during the last week of April. Overall, 54 percent of the winter wheat crop was reported in good to excellent condition on April 30, up 3 percentage points from the beginning of the month but 7 percentage points lower than at the same time last year.

By April 2, producers had planted 4 percent of this year's cotton crop, slightly ahead of last year but equal to the five-year average. Progress was behind normal in Arizona and California but equal to the 5-year average pace in Texas. Producers had planted 8 percent of this year's cotton crop by April 16, slightly ahead of last year but slightly behind the 5-year average. Planting was most active in California, where planting progress advanced 24 percentage points during that week. Nationally, cotton producers had planted 14 percent of the cotton crop by April 30, slightly behind last year and 3 percentage points behind the 5-year average. Producers in Texas, the largest cotton-producing State, had planted 13 percent of the crop by the end of the month, 3 percentage points behind the 5-year average.

With activity limited to Arkansas, Louisiana, and Texas, 15 percent of the Nation's sorghum crop had been planted by April 2, two percentage points ahead of last year and 3 percentage points ahead of the 5-year average. By April 16, twenty-one percent of this year's sorghum crop was planted, 5 percentage points ahead of last year and slightly ahead of the 5-year average. Planting remained largely limited to the Delta and the southern Great Plains by mid-month. Nationally, planting advanced to 27 percent complete by April 30, four percentage points ahead of last year and slightly ahead of the 5-year average. Rainfall slowed planting progress in the lower Mississippi Valley during the last week of April.

By April 2, producers had seeded 17 percent of the 2017 rice crop, 2 percentage points ahead of last year and 3 percentage points ahead of the 5-year average. With significant progress limited to Louisiana and Texas, 7 percent of the Nation's rice crop was emerged by April 2, slightly ahead of last year and 3 percentage points ahead of the 5-year average. By April 16, producers had seeded 55 percent of this year's rice crop, 9 percentage points ahead of last year and 18 percentage points ahead of the 5-year average. In Arkansas, where weather conditions aided fieldwork, seeding was 29 percentage points ahead of normal. Nationwide, 25 percent of the rice crop was emerged by April 16, seven percentage points ahead of last year and 8 percentage points ahead of the 5-year average. By April 30, seventy-three percent of the rice crop was seeded, 2 percentage points ahead of last year and 15 percentage points ahead of the 5-year average. Nationally, emergence advanced to 58 percent complete at month's end, 5 percentage points ahead of last year and 17 percentage points ahead of the 5-year average. During the last week of the month, an additional 20 percent of the crop had emerged in Arkansas, the Nation's leading rice-producing State.

Nationally, oat producers had seeded 28 percent of this year's crop by April 2, equal to last year but 6 percentage points behind the 5-year average. Oat planting progress was at or behind the 5-year average in all estimating States except Nebraska and Wisconsin at the beginning of the April. With progress mostly limited to the earlier-planted crop in Texas, 25 percent of the Nation's oat crop had emerged by April 2, slightly ahead of last year but 4 percentage points behind the 5-year average. Forty-five percent of the oat crop was seeded by April 16, eight percentage points behind last year and 7 percentage points behind the 5-year average. By April 30, oat producers had sown 67 percent of the Nation's crop,

10 percentage points behind last year and 3 percentage points behind the 5-year average. Nationally, 47 percent of the oat crop had emerged by week's end, 7 percentage points behind last year and 3 percentage points behind the 5-year average. Twenty percent or more of the crop emerged during the last week of the month in Ohio, Pennsylvania, and South Dakota.

Nine percent of the Nation's barley was planted by April 9, eight percentage points behind last year and 7 percentage points behind the 5-year average. Planting progress was behind the historical pace in all estimating States, including Washington with 3 percent planted, 21 percentage points behind the 5-year average. Twenty-seven percent of the barley crop was seeded by April 23, sixteen percentage points behind last year and 13 percentage points behind the 5-year average. Nationwide, 7 percent of the 2017 barley crop was emerged at that time, 7 percentage points behind last year and 3 percentage points behind the 5-year average. Barley producers had seeded 32 percent of the Nation's crop by April 30, twenty-three percentage points behind last year and 21 percentage points behind the 5-year average. All estimating States remained well behind their 5-year average planting pace. By April 30, emergence was evident in 14 percent of the Nation's barley acreage, 13 percentage points behind last year and 7 percentage points behind the 5-year average.

By April 9, five percent of the spring wheat crop was seeded, 7 percentage points behind last year and 6 percentage points behind the 5-year average. Spring wheat planting progress was behind the 5-year average pace in all 6 estimating States at that time. Spring wheat producers had seeded 13 percent of this year's crop by April 16, twelve percentage points behind last year and 8 percentage points behind the 5-year average. Planting proceeded rapidly in South Dakota during the week ending April 16, with progress advancing 29 percentage points. All other estimating States remained behind their 5-year average pace. Thirty-one percent of the spring wheat crop was seeded by April 30, twenty-one percentage points behind last year and 15 percentage points behind the 5-year average. Planting progress was behind the 5-year average in all estimating States except South Dakota. By April 30, nine percent of the spring wheat crop was emerged, 11 percentage points behind last year and 8 percentage points behind the 5-year average.

Nationally, peanut producers had planted 4 percent of this year's crop by April 23, equal to both last year and the 5-year average. Twelve percent of the Nation's peanut crop was planted by April 30, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Planting was most advanced in Florida, at 20 percent complete, 4 percentage points ahead of the 5-year average.

Five percent of the Nation's sugarbeet crop was planted by April 9, slightly ahead of last year but 5 percentage points behind the 5-year average. Planting progress was behind the 5-year average in all estimating States at that time. Planting had yet to begin by April 9 in Michigan due to wet conditions, despite a 5-year average planting pace of 18 percent complete. By April 30, sugarbeet producers had planted 48 percent of the Nation's crop, 29 percentage points behind last year and 12 percentage points behind the 5-year average. In Michigan, 32 percent of the crop was planted by month's end, with 25 percent planted during the last week of April.

## Crop Comments

**Winter wheat:** Production is forecast at 1.25 billion bushels, down 25 percent from 2016. As of May 1, the United States yield is forecast at 48.8 bushels per acre, down 6.5 bushels from last year's record yield of 55.3 bushels per acre. Expected grain area is forecast at 25.6 million acres, down 15 percent from last year. If realized, this will represent a record low for the United States. Hard Red Winter (HRW) harvested acreage is down 18 percent from the previous year. Soft Red Winter (SRW) harvested acreage is expected to be down 11 percent from last year. As of April 30, fifty-four percent of the winter wheat crop in the 18 major producing States was rated in good to excellent condition, 7 percentage points lower than at the same time last year. Nationally, 42 percent of the winter wheat crop was headed by April 30, eight percentage points ahead of the 5-year average pace. If realized, a record high yield is expected in Tennessee.

As of April 30, Kansas, Oklahoma, and Texas winter wheat was rated 49 percent, 47 percent, and 44 percent, in good to excellent condition, respectively. A spring storm in the Central and Southern Plains brought significant snowfall to several western counties in Kansas and the Oklahoma Panhandle during the last week of April.

As of April 30, Idaho, Oregon, and Washington winter wheat was rated 61 percent, 85 percent, and 83 percent, in good to excellent condition, respectively.

**Durum wheat:** Production of Durum wheat in Arizona and California is forecast at a collective 13.0 million bushels, down 3 percent from 2016. In Arizona, the crop was 70 percent headed by April 30, thirteen percentage points ahead of last year but 7 percentage points behind the 5-year average.

**Hay stocks on farms:** All hay stored on United States farms as of May 1, 2017 totaled 24.4 million tons, down 3 percent from the previous May. Disappearance from December 1, 2016 - May 1, 2017 totaled 71.4 million tons, compared with 69.9 million tons for the same period a year earlier.

With the exception of Nevada, hay stocks in most western States are estimated lower than in 2016. The majority of the eastern States reported higher stocks compared to the previous year due to a mild winter with no need to extend supplemental feeding.

**Grapefruit:** The United States 2016-2017 grapefruit crop is forecast at 672,000 tons, down 2 percent from last month and down 16 percent from last season's final utilization. In Florida, expected production, at 7.80 million boxes (332,000 tons), is down 4 percent from last month and down 28 percent from last year. California and Texas grapefruit production forecasts were carried forward from the previous month.

**Tangerines and mandarins:** The United States tangerine and mandarin crop is forecast at 957,000 tons, down slightly from last month but up 1 percent from last season's final utilization if tangelos were included. If realized, this will be the largest production since records began in 1964-1965. The Florida forecast is down 1 percent from last month and down 10 percent from 2015-2016, if tangelos were included. Beginning in 2016-2017, tangerine and mandarin estimates in Florida include tangelos. The California tangerine and mandarin forecast was carried forward from the previous month.

**Florida citrus:** In the citrus growing region, daily temperatures were reported as average or above on most days. Daytime highs were mostly in the mid-80s to lower 90s, while nighttime lows were mostly in the mid-50s to mid-60s. Rainfall was below normal in about two-thirds of the citrus growing region. About half of the monitored citrus counties had less than an inch of rainfall for the entire month. This compares with the typical rainfall for the month of April, which is just over two inches. According to the May 2, 2017 U.S. Drought Monitor, Highlands County in the Central citrus production area, and portions of each of its surrounding counties, were in an extreme drought condition. The remainder of the citrus region was in severe drought.

Valencia oranges were the only variety being harvested in significant quantity at this point. All other varieties were virtually finished for the season. The majority of the remaining late oranges were going to processing plants. Next season's fruit was still in various stages. Although the majority of the fruit was still less than marble size, some trees had fruit as large as golf balls from earlier blooms this season. Ditches and canals were dry in all areas due to the lack of rainfall since before the beginning of the year. Trees in well cared for and well irrigated groves looked good. Other grove activities included spraying, hedging, fertilizing, and general grove maintenance.

**California citrus:** The citrus harvest continued with some late navel oranges. Some orange groves were hedge-rowed and skirted throughout the month. Seedless tangerine groves continued to be netted to prevent cross pollination by bees during bloom. Late navel harvest continued until late April. Reports of rind issues in navels continued. Valencia and grapefruit were harvested, though Valencia oranges were accelerating and will continue in May. The late navel orange harvest neared completion toward the end of the month.

**California noncitrus fruits and nuts:** Reported field work in vineyards included pruning, tying, berm sanitation, and brush shredding. Cherries and some early varieties of stone fruit continued to bloom. In Stanislaus County, early varieties of cherries were turning red mid-month. Herbicides were being applied to orchard floors. Strong winds across the Central Valley knocked off petals and hampered bee activity the first week of April. The end of the stone fruit bloom progressed up the State and in Fresno County was essentially completed by mid-month. Fruit set was reported to be good and some thinning of immature stone fruit continued through month end. Grapevines were in the third to sixth leaf stage in Tulare County. Grapevines continued to leaf out and some leaves were removed to improve air circulation around the developing grape bunches. Due to the continued sporadic rains, fungicides were applied to vineyards. Thinning of

immature stone fruit started. Olive trees were blooming. Kiwi vines were leafing out as the temperatures warmed. Mechanical and chemical weed control continued. Older vineyards and orchards continued to be pushed out. Almond bloom wrapped up for the season with some reports from early orchards of a good set. New orchards of almonds and walnuts continued to be planted as growers pondered the partial water allocations recently announced and how to best utilize the available water. Winds early in the month accelerated the drying of orchards flooded earlier this year. Orchard clean up continued in impacted areas where heavy rains and wind storms occurred. A good set was reported for almonds in many orchards in the San Joaquin Valley. Pistachio and walnuts were blooming early mid-month. Strong winds knocked down some branches in Yolo County. In Stanislaus County, field fumigations for almond pre-plants were occurring frequently. In San Joaquin County, walnut orchard pruning was winding down toward the end of April.

**Peaches:** The California 2017 peach crop is forecast at 625,000 tons, up 8 percent from 2016. The California Freestone crop is forecast at 295,000 tons, up 13 percent from last season. Growers reported concerns about potential labor shortages for harvest. The California Clingstone crop is forecast at 330,000 tons, up 3 percent from 2016. Growers reported full bloom occurred in early-March, nearly two weeks later than last year. In the southern growing areas, bloom was reported to be adequate, although somewhat staggered. Growers were able to keep up with pruning and bloom sprays despite above average rainfall during February. In the northern growing areas, bloom was reported to be long and steady with a strong set.

**Almonds:** The 2017 California almond production (shelled basis) is forecast at 2.20 billion pounds, up 3 percent from the 2016 production of 2.14 billion pounds. The 2017 bloom period was extended due to cold temperatures. Significant rainfall before and during bloom made the application of sprays difficult but was beneficial to the crop overall. Growers reported set to be good and that nuts were developing well.

**Spring potatoes:** Production for 2017 is forecast at 17.7 million cwt, up 17 percent from 2016. Planted area is estimated at 54,000 acres, a 4 percent increase from the March intentions. Area for harvest is forecast at 52,700 acres, up 10 percent from the previous year. The average yield forecast, at 337 cwt per acre, is up 21 cwt from 2016.

Florida potato harvest started in the Hastings area. Producers reported extremely dry conditions throughout the State which required them to irrigate more this year. California growers reported a good crop as the major growing areas were not impacted by the excessive rains, and flooding across much of the State.

**2016 Cotton Final:** All cotton production is estimated at 17.2 million 480-pound bales, up 33 percent from the 2015 total. The United States yield for all cotton is estimated at 867 pounds per acre, up 101 pounds from the previous year. Record high yields are estimated in Alabama, California, Kansas, and Tennessee.

Upland cotton production is estimated at 16.6 million 480-pound bales, up 33 percent from the 2015 total. The United States yield for Upland cotton is estimated at 855 pounds per acre, up 100 pounds from 2015.

America Pima production is estimated at 568,900 bales (480-pounds), up 31 percent from 2015. The United States yield is estimated at 1,454 pounds per acre, up 112 pounds from the previous season.

**Cottonseed:** Cottonseed production in 2016 totaled 5.37 million tons, up 33 percent from the previous year. Sales to oil mills accounted for 54 percent of the disposition. The remaining 46 percent will be used for seed, feed, exports, and various other uses.

## Statistical Methodology

**Wheat survey procedures:** Objective yield and farm operator surveys were conducted between April 24 and May 4 to gather information on expected yield as of May 1. The objective yield survey was conducted in three States (Kansas, Oklahoma, and Texas) where wheat is normally mature enough to make meaningful counts. 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 would 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 included a sample of approximately 11,300 producers representing all major production areas. The survey was conducted primarily by telephone with some use of mail, internet and personal interviewers. These producers were selected from an earlier acreage survey and were asked about the probable winter wheat acres for harvest and 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 May 1 forecast was conducted in Florida, which produces about 60 percent of the United States production last season. In August and September 2016, the number of bearing trees and the number of fruit per tree is 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 and packer 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 May 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 May 1 forecast. The May 1 orange production forecasts for California and Texas are carried forward from April.

**Revision Policy:** The May 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 May 1 production forecast, the "Root Mean Square Error," a statistical measure based on past performance, is computed. The deviation between the May 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 May 1 winter wheat production forecast is 7.5 percent. This means that chances are two out of three that the current production forecast will not be above or below the final estimate by more than 7.5 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 13.0 percent. Differences between the May 1 winter wheat production forecast and the final estimate during the past 20 years have averaged 97 million bushels, ranging from 6 million to 284 million bushels. The May 1 forecast has been below the final estimate 10 times and above 10 times. This does not imply that the May 1 winter wheat forecast this year is likely to understate or overstate final production.

The "Root Mean Square Error" for the May 1 orange production forecast is 2.4 percent. However, if you exclude the three abnormal production seasons (one freeze season and two hurricane seasons), the "Root Mean Square Error" is 2.6 percent. This means that chances are 2 out of 3 that the current orange production forecast will not be above or below the final estimates by more than 2.4 percent, or 2.6 percent, excluding abnormal seasons. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 4.1 percent, or 4.4 percent, excluding abnormal seasons.

Changes between the May 1 orange forecast and the final estimates during the past 20 years have averaged 153,000 tons (171,000 tons, excluding abnormal seasons), ranging from 19,000 tons to 441,000 tons (36,000 tons to 441,000 tons, excluding abnormal seasons). The May 1 forecast for oranges has been below the final estimate 10 times and above 10 times (below 8 times and above 9 times, excluding abnormal seasons). This does not imply that the May 1 forecast this year is likely to understate or overstate final production.

## 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@nass.usda.gov](mailto:nass@nass.usda.gov)

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James Johanson – County Estimates, Hay .....	(202) 690-8533
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Scott Matthews – Crop Weather, Barley.....	(202) 720-7621
Sammy Neal – Peanuts, Rice .....	(202) 720-7688
Jean Porter – Rye, Wheat .....	(202) 720-8068
Bianca Pruneda – Cotton, Cotton Ginnings, Sorghum.....	(202) 720-5944
Travis Thorson – Sunflower, Other Oilseeds .....	(202) 720-7369
Jorge Garcia-Pratts, Head, Fruits, Vegetables and Special Crops Section.....	(202) 720-2127
Vincent Davis – Fresh and Processing Vegetables, Onions, Strawberries, Sugarbeets, Sugarcane, Cherries.....	(202) 720-2157
Fleming Gibson – Citrus, Coffee, Tropical Fruits.....	(202) 720-5412
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Daphne Schauber – Floriculture, Grapes, Hops, Maple Syrup, Nursery, Tree Nuts .....	(202) 720-4215
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