Crop Production

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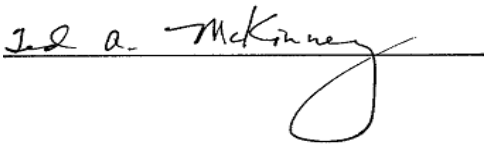
Winter Wheat Production Up Less Than 1 Percent from May Forecast
Orange Production Down 1 Percent

Winter wheat production is forecast at 1.27 billion bushels, up less than 1 percent from the May 1 forecast and up 8 percent from 2018. As of June 1, the United States yield is forecast at 50.5 bushels per acre, up 0.2 bushel from last month and up 2.6 bushels from last year's average yield of 47.9 bushels per acre.

Hard Red Winter production, at 794 million bushels, is up 2 percent from last month. Soft Red Winter, at 258 million bushels, is down 2 percent from the May forecast. White Winter, at 222 million bushels, is down 1 percent from last month. Of the White Winter production, 22.4 million bushels are Hard White and 199 million bushels are Soft White.

The United States all orange forecast for the 2018-2019 season is 5.25 million tons, down 1 percent from last month but up 34 percent from the 2017-2018 final utilization. The Florida all orange forecast, at 71.4 million boxes (3.21 million tons), is down 1 percent from last month but up 58 percent from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 30.4 million boxes (1.37 million tons), unchanged from last month but up 60 percent from last season's final utilization. The Florida Valencia orange forecast, at 41.0 million boxes (1.85 million tons), is down 2 percent from last month but up 57 percent from last season's final utilization. The California and Texas orange production forecasts were carried forward from the previous month.

This report was approved on June 11, 2019.



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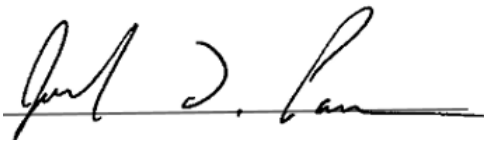

Agricultural Statistics Board
Chairperson
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Winter Wheat Area Harvested, Yield, and Production – States and United States: 2018 and Forecasted June 1, 2019

State	Area harvested		Yield per acre			Production	
	2018	2019	2018	2019		2018	2019
				May 1	June 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arkansas	95	60	55.0	61.0	60.0	5,225	3,600
California	110	120	77.0	72.0	65.0	8,470	7,800
Colorado	1,950	2,150	36.0	41.0	41.0	70,200	88,150
Idaho	680	690	90.0	87.0	83.0	61,200	57,270
Illinois	560	560	66.0	67.0	65.0	36,960	36,400
Indiana	260	260	71.0	73.0	69.0	18,460	17,940
Kansas	7,300	6,600	38.0	49.0	50.0	277,400	330,000
Kentucky	300	340	66.0	75.0	77.0	19,800	26,180
Maryland	200	165	63.0	67.0	67.0	12,600	11,055
Michigan	470	520	76.0	76.0	74.0	35,720	38,480
Mississippi	30	20	49.0	55.0	52.0	1,470	1,040
Missouri	520	470	59.0	61.0	56.0	30,680	26,320
Montana	1,570	1,750	50.0	43.0	45.0	78,500	78,750
Nebraska	1,010	1,000	49.0	50.0	50.0	49,490	50,000
North Carolina	370	225	57.0	54.0	56.0	21,090	12,600
North Dakota	70	75	43.0	46.0	50.0	3,010	3,750
Ohio	450	420	75.0	69.0	63.0	33,750	26,460
Oklahoma	2,500	3,000	28.0	35.0	37.0	70,000	111,000
Oregon	695	710	67.0	58.0	57.0	46,565	40,470
South Dakota	660	720	48.0	54.0	52.0	31,680	37,440
Tennessee	285	225	65.0	65.0	67.0	18,525	15,075
Texas	1,750	2,350	32.0	33.0	33.0	56,000	77,550
Virginia	155	115	60.0	62.0	67.0	9,300	7,705
Washington	1,650	1,650	76.0	68.0	69.0	125,400	113,850
Wisconsin	200	170	71.0	71.0	65.0	14,200	11,050
Other States [1]	902	849	53.5	51.6	52.4	48,244	44,516
United States	24,742	25,214	47.9	50.3	50.5	1,183,939	1,274,451

[1] For 2018, 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. For 2019, 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 2019 Summary.*

Durum Wheat Area Harvested, Yield, and Production – States and United States: 2018 and Forecasted June 1, 2019

[Area harvested for the United States and remaining States will be published in the *Acreage* report released June 2019. Yield and production will be published in the *Crop Production* report released July 2019. Blank data cells indicate estimation period has not yet begun]

State	Area harvested		Yield per acre			Production	
	2018	2019	2018	2019		2018	2019
				May 1	June 1		
	(1,000 acres)	(1,000 acres)	(bushels)	(bushels)	(bushels)	(1,000 bushels)	(1,000 bushels)
Arizona	70	39	106.0	107.0	102.0	7,420	3,978
California	33	38	95.0	105.0	105.0	3,135	3,990
Idaho	11		85.0			935	
Montana	775		30.0			23,250	
North Dakota	1,075		39.5			42,463	
South Dakota [1]	3	(NA)	28.0	(NA)	(NA)	84	(NA)
United States	1,967		39.3			77,287	

(NA) Not available.
[1] Estimates discontinued in 2019.

Wheat Production by Class – United States: 2018 and Forecasted June 1, 2019

[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	2018	2019
	(1,000 bushels)	(1,000 bushels)
Winter		
Hard red	662,249	794,395
Soft red	285,558	258,302
Hard white	19,347	22,399
Soft white	216,785	199,355
Spring		
Hard red	587,007	
Hard white	13,510	
Soft white	22,715	
Durum	77,287	
Total	1,884,458	

Utilized Production of Citrus Fruits by Crop – States and United States: 2017-2018 and Forecasted June 1, 2019

[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	
	2017-2018	2018-2019	2017-2018	2018-2019
	(1,000 boxes)	(1,000 boxes)	(1,000 tons)	(1,000 tons)
Oranges				
California, all [2]	45,400	49,000	1,816	1,960
Early, mid, and Navel [3]	35,900	40,000	1,436	1,600
Valencia	9,500	9,000	380	360
Florida, all	45,050	71,400	2,028	3,213
Early, mid, and Navel [3]	18,950	30,400	853	1,368
Valencia	26,100	41,000	1,175	1,845
Texas, all [2]	1,880	1,875	80	79
Early, mid, and Navel [3]	1,530	1,300	65	55
Valencia	350	575	15	24
United States, all	92,330	122,275	3,924	5,252
Early, mid, and Navel [3]	56,380	71,700	2,354	3,023
Valencia	35,950	50,575	1,570	2,229
Grapefruit				
California [2]	4,000	4,000	160	160
Florida, all	3,880	4,510	165	192
Red	3,180	3,740	135	159
White	700	770	30	33
Texas [2]	4,800	6,300	192	252
United States	12,680	14,810	517	604
Tangerines and mandarins [4]				
California [2]	19,200	22,000	768	880
Florida	750	990	36	47
United States	19,950	22,990	804	927
Lemons [2]				
Arizona	1,000	1,300	40	52
California	21,200	20,000	848	800
United States	22,200	21,300	888	852

[1] Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California-80, Florida-85, Texas-80; tangerines and mandarins in California-80, Florida-95; lemons-80.
[2] Estimates for current year carried forward from an earlier forecast.
[3] Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas.
[4] Includes tangelos and tangors.

Prune Production – States and United States: 2018 and Forecasted June 1, 2019

[Production is for dried basis]

State	Total production	
	2018	2019
	(tons)	(tons)
California	80,000	110,000
United States	80,000	110,000

Tart Cherry Production – States and United States: 2018 and Forecasted June 1, 2019

State	Total production	
	2018	2019
	(million pounds)	(million pounds)
Michigan	264.0	208.0
New York	11.9	9.4
Utah	42.8	40.3
Washington	23.8	23.5
Wisconsin	10.2	9.0
United States	352.7	290.2

Sweet Cherry Production – States and United States: 2018 and Forecasted June 1, 2019

State	Total production	
	2018	2019
	(tons)	(tons)
California	36,000	50,000
Michigan [1]	23,900	(NA)
Oregon	45,000	62,000
Washington	215,000	250,000
United States	319,900	362,000

(NA) Not available.
[1] Estimates discontinued.

Maple Syrup Taps, Yield, and Production – States and United States: 2017-2019

State	Number of taps			Yield per tap			Production		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
	(1,000 taps)	(1,000 taps)	(1,000 taps)	(gallons)	(gallons)	(gallons)	(1,000 gallons)	(1,000 gallons)	(1,000 gallons)
Connecticut [1]	78	73	(NA)	0.231	0.247	(NA)	18	18	(NA)
Indiana [1]	70	70	(NA)	0.200	0.257	(NA)	14	18	(NA)
Maine	1,900	1,870	1,900	0.376	0.288	0.305	715	539	580
Massachusetts [1]	320	320	(NA)	0.263	0.225	(NA)	84	72	(NA)
Michigan	600	600	620	0.250	0.275	0.315	150	165	195
Minnesota [1]	83	65	(NA)	0.205	0.200	(NA)	17	13	(NA)
New Hampshire	570	560	540	0.281	0.291	0.274	160	163	148
New York	2,650	2,730	2,800	0.287	0.295	0.293	760	806	820
Ohio [1]	420	400	(NA)	0.200	0.225	(NA)	84	90	(NA)
Pennsylvania	780	670	680	0.212	0.212	0.231	165	142	157
Vermont	5,900	5,670	6,000	0.339	0.342	0.345	2,000	1,940	2,070
West Virginia [1]	70	66	(NA)	0.157	0.121	(NA)	11	8	(NA)
Wisconsin	760	750	800	0.272	0.300	0.338	207	225	270
United States	14,201	13,844	13,340	0.309	0.303	0.318	4,385	4,199	4,240

(NA) Not available.
[1] Estimates discontinued in 2019.

Maple Syrup Price and Value – States and United States: 2017-2019

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

State	Average price per gallon			Value of production		
	2017	2018	2019 [1]	2017	2018	2019 [1]
	(dollars)	(dollars)	(dollars)	(1,000 dollars)	(1,000 dollars)	(1,000 dollars)
Connecticut [2]	62.20	76.00	(NA)	1,120	1,368	(NA)
Indiana [2]	50.20	50.20	(NA)	703	904	(NA)
Maine	33.70	40.20		24,096	21,668	
Massachusetts [2]	50.20	53.00	(NA)	4,217	3,816	(NA)
Michigan	51.20	38.90		7,680	6,419	
Minnesota [2]	66.60	61.60	(NA)	1,132	801	(NA)
New Hampshire	43.50	56.10		6,960	9,144	
New York	39.00	32.40		29,640	26,114	
Ohio [2]	38.50	45.40	(NA)	3,234	4,086	(NA)
Pennsylvania	34.30	39.00		5,660	5,538	
Vermont	27.00	28.00		54,000	54,320	
West Virginia [2]	36.70	44.60	(NA)	404	357	(NA)
Wisconsin	31.40	32.40		6,500	7,290	
United States	33.10	33.80		145,346	141,825	

(NA) Not available.
[1] Price and value for 2019 will be published in *Crop Production* released June 2020.
[2] Estimates discontinued in 2019.

Maple Syrup Season – States and United States: 2017-2019

State	Date season opened [1]			Date season closed [2]			Average season length [3]		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
	(date)	(date)	(date)	(date)	(date)	(date)	(days)	(days)	(days)
Connecticut [4]	Jan 20	Jan 22	(NA)	Apr 25	Apr 30	(NA)	42	43	(NA)
Indiana [4]	Jan 1	Jan 10	(NA)	Apr 2	Apr 14	(NA)	31	37	(NA)
Maine	Jan 16	Feb 1	Jan 15	May 26	May 3	May 10	41	42	31
Massachusetts [4]	Jan 10	Feb 2	(NA)	Apr 13	Apr 21	(NA)	42	42	(NA)
Michigan	Jan 26	Jan 23	Feb 10	Apr 20	May 1	Apr 26	32	41	25
Minnesota [4]	Feb 12	Mar 1	(NA)	Apr 28	May 1	(NA)	30	32	(NA)
New Hampshire	Jan 7	Jan 28	Jan 21	Apr 22	May 2	Apr 28	42	43	31
New York	Jan 1	Jan 12	Jan 5	May 4	May 2	May 1	43	52	32
Ohio [4]	Jan 1	Jan 18	(NA)	Apr 6	Apr 26	(NA)	33	41	(NA)
Pennsylvania	Jan 2	Jan 7	Jan 10	Apr 17	Apr 28	May 1	39	45	35
Vermont	Jan 1	Jan 12	Jan 9	May 14	May 3	May 3	46	52	34
West Virginia [4]	Jan 5	Jan 19	(NA)	Apr 10	Apr 10	(NA)	32	37	(NA)
Wisconsin	Feb 6	Feb 18	Mar 1	Apr 30	May 2	Apr 30	29	36	24
United States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	37	42	30

(NA) Not available.
[1] Approximately the first day that sap was collected.
[2] Approximately the last day that sap was collected.
[3] The average number of days that sap was collected.
[4] Estimates discontinued in 2019.

Maple Syrup Average Open and Close Season Dates – States and United States: 2017-2019

State	Season Opened [1]			Season Closed [2]		
	2017	2018	2019	2017	2018	2019
	(date)	(date)	(date)	(date)	(date)	(date)
Connecticut [3]	Feb 12	Feb 12	(NA)	Mar 26	Mar 26	(NA)
Indiana [3]	Feb 9	Feb 10	(NA)	Mar 12	Mar 19	(NA)
Maine	Mar 2	Feb 26	Mar 14	Apr 12	Apr 9	Apr 14
Massachusetts [3]	Feb 19	Feb 18	(NA)	Apr 2	Apr 1	(NA)
Michigan	Feb 24	Feb 28	Mar 13	Mar 28	Apr 10	Apr 7
Minnesota [3]	Mar 4	Mar 21	(NA)	Apr 3	Apr 22	(NA)
New Hampshire	Feb 24	Feb 24	Mar 10	Apr 7	Apr 8	Apr 10
New York	Feb 18	Feb 18	Mar 6	Apr 2	Apr 11	Apr 7
Ohio [3]	Feb 11	Feb 14	(NA)	Mar 16	Mar 27	(NA)
Pennsylvania	Feb 11	Feb 17	Feb 25	Mar 22	Apr 3	Apr 1
Vermont	Feb 23	Feb 23	Mar 12	Apr 10	Apr 16	Apr 15
West Virginia [3]	Feb 3	Feb 4	(NA)	Mar 7	Mar 14	(NA)
Wisconsin	Mar 4	Mar 16	Mar 21	Apr 2	Apr 21	Apr 14
United States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available.
[1] Approximate average opened date based on reported data.
[2] Approximate average closed date based on reported data.
[3] Estimates discontinued in 2019.

Maple Syrup Price by Type of Sale and Size of Container – States: 2017 and 2018

Type and State	Gallon		1/2 Gallon		Quart		Pint		1/2 Pint	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)
Retail										
Connecticut	51.60	62.90	32.40	38.00	20.10	21.40	11.90	13.40	7.30	8.60
Indiana	40.70	41.00	23.20	25.50	14.10	14.60	9.10	8.40	5.70	6.20
Maine	54.10	53.40	31.10	31.40	17.40	17.50	10.40	10.60	6.10	6.60
Massachusetts	48.90	53.80	31.00	32.60	19.30	19.50	11.40	12.60	7.20	9.00
Michigan	47.00	46.70	26.70	26.50	15.20	15.80	9.30	10.50	6.90	7.10
Minnesota	58.60	50.30	30.50	31.50	16.30	16.90	9.00	8.30	7.40	7.00
New Hampshire	53.30	57.00	30.30	32.80	18.40	19.50	10.60	10.70	6.00	6.75
New York	46.90	42.60	27.50	25.90	17.20	15.90	10.70	9.50	7.80	5.80
Ohio	40.60	45.60	24.00	25.20	13.80	15.50	9.00	9.50	6.10	7.10
Pennsylvania	41.40	47.20	24.70	26.80	14.20	16.00	8.20	9.40	5.10	5.60
Vermont	44.80	45.30	26.60	26.40	16.10	16.70	9.90	9.70	5.90	7.50
West Virginia	44.40	53.90	27.40	29.10	16.40	16.30	8.80	10.70	5.60	6.30
Wisconsin	44.80	43.20	23.90	24.90	13.60	14.70	7.80	8.50	5.80	4.80
Wholesale										
Connecticut	(D)	53.60	(D)	(D)	15.10	16.60	8.50	8.00	5.00	5.40
Indiana	42.70	32.80	(D)	21.80	11.00	11.30	(D)	5.30	(S)	(S)
Maine	48.40	43.60	24.10	19.70	13.20	13.00	7.90	7.90	5.20	4.75
Massachusetts	44.20	45.20	24.90	25.50	15.10	14.80	8.40	8.10	5.45	5.30
Michigan	43.00	43.60	23.40	23.10	12.90	12.60	7.80	7.50	5.10	5.00
Minnesota	46.90	45.00	(D)	(S)	(D)	18.80	(D)	10.40	(D)	(D)
New Hampshire	44.90	47.30	21.80	26.40	12.80	15.20	7.70	8.25	4.80	6.15
New York	46.00	37.40	25.00	23.60	14.10	12.80	9.20	7.90	6.60	4.70
Ohio	39.50	40.20	22.50	21.40	14.30	13.10	7.70	7.40	6.10	4.40
Pennsylvania	29.70	29.80	21.90	19.10	13.70	13.00	7.60	7.70	4.70	4.00
Vermont	40.10	38.80	22.20	22.80	12.90	13.50	7.40	7.60	4.40	4.40
West Virginia	50.00	(D)	26.20	24.60	16.70	14.80	8.50	9.00	5.40	5.00
Wisconsin	39.40	43.80	23.00	23.70	11.10	12.90	6.50	6.80	4.10	5.60

(D) Withheld to avoid disclosing data for individual operations.
(S) Insufficient number of reports to establish an estimate.

Maple Syrup Bulk Price – States: 2017 and 2018

State	Bulk all grades		Bulk all grades	
	2017	2018	2017	2018
	(dollars per pound)	(dollars per pound)	(dollars per gallon)	(dollars per gallon)
Connecticut	(D)	(D)	(D)	(D)
Indiana	3.00	3.25	32.90	35.60
Maine	2.26	2.16	24.90	23.80
Massachusetts	2.40	2.60	26.60	28.70
Michigan	2.55	2.30	28.20	25.50
Minnesota	2.50	3.50	27.50	38.40
New Hampshire	2.05	2.15	22.70	23.50
New York	2.10	2.10	22.90	23.20
Ohio	2.20	2.40	24.40	26.55
Pennsylvania	2.19	2.16	24.10	23.80
Vermont	2.20	2.20	24.20	24.20
West Virginia	2.70	2.90	29.70	32.20
Wisconsin	2.10	2.10	23.30	23.20

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

Maple Syrup Percent of Sales by Type – States: 2017 and 2018

State	Retail		Wholesale		Bulk	
	2017	2018	2017	2018	2017	2018
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Connecticut	(D)	68	41	27	(D)	5
Indiana	56	86	40	9	4	5
Maine	2	19	1	17	97	64
Massachusetts	37	40	29	27	34	33
Michigan	38	39	35	28	27	33
Minnesota	83	55	5	25	12	20
New Hampshire	37	54	17	11	46	35
New York	23	25	20	8	57	67
Ohio	42	46	16	21	42	33
Pennsylvania	33	44	14	12	53	44
Vermont	6	9	2	4	92	87
West Virginia	12	23	6	17	82	60
Wisconsin	16	19	13	16	71	65

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

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Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2018 and 2019

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2019 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Area planted		Area harvested	
	2018	2019	2018	2019
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Grains and hay				
Barley	2,543	2,550	1,978	
Corn for grain [1]	89,129	92,792	81,740	
Corn for silage	(NA)		6,113	
Hay, all	(NA)	(NA)	52,839	53,090
Alfalfa	(NA)		16,608	
All other	(NA)		36,231	
Oats	2,746	2,555	865	
Proso millet	443		403	
Rice	2,946	2,870	2,915	
Rye	2,011		273	
Sorghum for grain [1]	5,690	5,135	5,061	
Sorghum for silage	(NA)		264	
Wheat, all	47,800	45,754	39,605	
Winter	32,535	31,504	24,742	25,214
Durum	2,065	1,420	1,967	
Other spring	13,200	12,830	12,896	
Oilseeds				
Canola	1,990.7	1,904.0	1,943.5	
Cottonseed	(X)		(X)	
Flaxseed	208	345	198	
Mustard seed	102.5		97.5	
Peanuts	1,425.5	1,449.0	1,368.5	
Rapeseed	5.7		5.4	
Safflower	167.5		156.4	
Soybeans for beans	89,196	84,617	88,110	
Sunflower	1,301.0	1,349.0	1,222.5	
Cotton, tobacco, and sugar crops				
Cotton, all	14,100.3	13,780.0	10,205.8	
Upland	13,850.0	13,525.0	9,957.0	
American Pima	250.3	255.0	248.8	
Sugarbeets	1,113.1	1,120.2	1,095.4	
Sugarcane	(NA)		899.7	
Tobacco	(NA)	(NA)	291.4	244.0
Dry beans, peas, and lentils				
Austrian winter peas [2]	16.4	(NA)	10.9	(NA)
Chickpeas [3]	859.6	519.0	842.8	
Dry edible beans [3]	2,081.0	1,237.0	2,016.0	
Dry edible peas [2]	856.5	881.0	807.9	
Lentils	780.0	555.0	718.0	
Wrinkled seed peas [2]	(NA)	(NA)	(NA)	(NA)
Potatoes and miscellaneous				
Hops	(NA)		55.0	
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		58.5	
Potatoes	1,033.2		1,023.3	
Spearmint oil	(NA)		20.8	
Taro (Hawaii) [4]	(NA)	(NA)	0.3	(NA)

See footnote(s) at end of table.

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Crop Area Planted and Harvested, Yield, and Production in Domestic Units – United States: 2018 and 2019 (continued)

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2019 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Yield per acre		Production	
	2018	2019	2018	2019
			(1,000)	(1,000)
Grains and hay				
Barley ..... bushels	77.4		153,082	
Corn for grain ..... bushels	176.4		14,420,101	
Corn for silage ..... tons	19.9		121,361	
Hay, all ..... tons	2.34		123,600	
Alfalfa ..... tons	3.17		52,634	
All other ..... tons	1.96		70,966	
Oats ..... bushels	64.9		56,130	
Proso millet ..... bushels	29.8		11,991	
Rice [5] ..... cwt	7,692		224,211	
Rye ..... bushels	30.9		8,432	
Sorghum for grain ..... bushels	72.1		364,986	
Sorghum for silage ..... tons	12.6		3,326	
Wheat, all ..... bushels	47.6		1,884,458	
Winter ..... bushels	47.9	50.5	1,183,939	1,274,451
Durum ..... bushels	39.3		77,287	
Other spring ..... bushels	48.3		623,232	
Oilseeds				
Canola ..... pounds	1,861		3,616,560	
Cottonseed ..... tons	(X)		5,631.0	
Flaxseed ..... bushels	22.6		4,466	
Mustard seed ..... pounds	750		73,078	
Peanuts ..... pounds	3,991		5,461,600	
Rapeseed ..... pounds	1,524		8,230	
Safflower ..... pounds	1,511		236,380	
Soybeans for beans ..... bushels	51.6		4,543,883	
Sunflower ..... pounds	1,731		2,116,410	
Cotton, tobacco, and sugar crops				
Cotton, all [5] ..... bales	864		18,367.0	
Upland [5] ..... bales	847		17,566.0	
American Pima [5] ..... bales	1,545		801.0	
Sugarbeets ..... tons	30.3		33,145	
Sugarcane ..... tons	38.4		34,542	
Tobacco ..... pounds	1,830		533,241	
Dry beans, peas, and lentils				
Austrian winter peas [2 5] ..... cwt	1,138	(NA)	124	(NA)
Chickpeas, all [3 5] ..... cwt	1,512		12,742	
Dry edible beans [3 5] ..... cwt	1,860		37,494	
Dry edible peas [2 5] ..... cwt	1,972		15,929	
Lentils [5] ..... cwt	1,171		8,408	
Wrinkled seed peas [2] ..... cwt	(NA)	(NA)	389	(NA)
Potatoes and miscellaneous				
Hops ..... pounds	1,943		106,906.7	
Maple syrup ..... gallons	(NA)	(NA)	4,199	4,240
Mushrooms ..... pounds	(NA)		917,235	
Peppermint oil ..... pounds	92		5,377	
Potatoes ..... cwt	444		454,314	
Spearmint oil ..... pounds	124		2,571	
Taro (Hawaii) [4] ..... pounds	9,630	(NA)	2,985	(NA)

(NA) Not available.
(X) Not applicable.
[1] Area planted for all purposes.
[2] Beginning in 2019, Austrian winter peas and wrinkled seed peas are included in dry edible peas.
[3] Beginning in 2019, chickpeas are excluded from dry edible beans.
[4] Estimates discontinued in 2019.
[5] Yield in pounds.

Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2018 and 2019

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2019 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Area planted		Area harvested	
	2018	2019	2018	2019
	(hectares)	(hectares)	(hectares)	(hectares)
Grains and hay				
Barley	1,029,130	1,031,960	800,480	
Corn for grain [1]	36,069,620	37,551,990	33,079,360	
Corn for silage	(NA)		2,473,870	
Hay, all [2]	(NA)	(NA)	21,383,410	21,484,990
Alfalfa	(NA)		6,721,090	
All other	(NA)		14,662,320	
Oats	1,111,280	1,033,980	350,060	
Proso millet	179,280		163,090	
Rice	1,192,220	1,161,460	1,179,670	
Rye	813,830		110,480	
Sorghum for grain [1]	2,302,690	2,078,080	2,048,140	
Sorghum for silage	(NA)		106,840	
Wheat, all [2]	19,344,180	18,516,190	16,027,750	
Winter	13,166,590	12,749,350	10,012,840	10,203,850
Durum	835,680	574,660	796,030	
Other spring	5,341,910	5,192,170	5,218,880	
Oilseeds				
Canola	805,620	770,530	786,520	
Cottonseed	(X)		(X)	
Flaxseed	84,180	139,620	80,130	
Mustard seed	41,480		39,460	
Peanuts	576,890	586,400	553,820	
Rapeseed	2,310		2,190	
Safflower	67,790		63,290	
Soybeans for beans	36,096,730	34,243,650	35,657,240	
Sunflower	526,500	545,930	494,730	
Cotton, tobacco, and sugar crops				
Cotton, all [2]	5,706,250	5,576,630	4,130,190	
Upland	5,604,960	5,473,430	4,029,500	
American Pima	101,290	103,200	100,690	
Sugarbeets	450,460	453,330	443,300	
Sugarcane	(NA)		364,100	
Tobacco	(NA)	(NA)	117,940	98,760
Dry beans, peas, and lentils				
Austrian winter peas [3]	6,640	(NA)	4,410	(NA)
Chickpeas [4]	347,870	210,030	341,070	
Dry edible beans [4]	842,160	500,600	815,860	
Dry edible peas [3]	346,620	356,530	326,950	
Lentils	315,660	224,600	290,570	
Wrinkled seed peas [3]	(NA)	(NA)	(NA)	(NA)
Potatoes and miscellaneous				
Hops	(NA)		22,270	
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		23,670	
Potatoes	418,130		414,120	
Spearmint oil	(NA)		8,420	
Taro (Hawaii) [5]	(NA)	(NA)	130	(NA)

See footnote(s) at end of table.

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Crop Area Planted and Harvested, Yield, and Production in Metric Units – United States: 2018 and 2019 (continued)

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2019 crop year. Blank data cells indicate estimation period has not yet begun]

Crop	Yield per hectare		Production	
	2018	2019	2018	2019
	(metric tons)	(metric tons)	(metric tons)	(metric tons)
Grains and hay				
Barley	4.16		3,332,970	
Corn for grain	11.07		366,287,440	
Corn for silage	44.50		110,096,850	
Hay, all [2]	5.24		112,128,030	
Alfalfa	7.10		47,748,760	
All other	4.39		64,379,270	
Oats	2.33		814,720	
Proso millet	1.67		271,950	
Rice	8.62		10,170,040	
Rye	1.94		214,180	
Sorghum for grain	4.53		9,271,070	
Sorghum for silage	28.24		3,017,300	
Wheat, all [2]	3.20		51,286,540	
Winter	3.22	3.40	32,221,540	34,684,870
Durum	2.64		2,103,410	
Other spring	3.25		16,961,600	
Oilseeds				
Canola	2.09		1,640,440	
Cottonseed	(X)		5,108,360	
Flaxseed	1.42		113,440	
Mustard seed	0.84		33,150	
Peanuts	4.47		2,477,340	
Rapeseed	1.71		3,730	
Safflower	1.69		107,220	
Soybeans for beans	3.47		123,664,230	
Sunflower	1.94		959,990	
Cotton, tobacco, and sugar crops				
Cotton, all [2]	0.97		3,998,940	
Upland	0.95		3,824,550	
American Pima	1.73		174,400	
Sugarbeets	67.83		30,068,640	
Sugarcane	86.06		31,335,980	
Tobacco	2.05		241,870	
Dry beans, peas, and lentils				
Austrian winter peas [3]	1.28	(NA)	5,620	(NA)
Chickpeas [4]	1.69		577,970	
Dry edible beans [4]	2.08		1,700,700	
Dry edible peas [3]	2.21		722,530	
Lentils	1.31		381,380	
Wrinkled seed peas [3]	(NA)	(NA)	17,640	(NA)
Potatoes and miscellaneous				
Hops	2.18		48,490	
Maple syrup	(NA)	(NA)	21,000	21,200
Mushrooms	(NA)		416,050	
Peppermint oil	0.10		2,440	
Potatoes	49.76		20,607,340	
Spearmint oil	0.14		1,170	
Taro (Hawaii) [5]	10.80	(NA)	1,350	(NA)

(NA) Not available.
(X) Not applicable.
[1] Area planted for all purposes.
[2] Total may not add due to rounding.
[3] Beginning in 2019, Austrian winter peas and wrinkled seed peas are included in dry edible peas.
[4] Beginning in 2019, chickpeas are excluded from dry edible beans.
[5] Estimates discontinued in 2019.

Fruits and Nuts Production in Domestic Units – United States: 2018 and 2019

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2019 crop year, except citrus which is for the 2018-2019 season. Blank data cells indicate estimation period has not yet begun]

Crop		Production	
		2018	2019
Citrus [1]			
Grapefruit	1,000 tons	517	604
Lemons	1,000 tons	888	852
Oranges	1,000 tons	3,924	5,252
Tangerines and mandarins	1,000 tons	804	927
Noncitrus			
Apples, commercial	million pounds	11,452.2	
Apricots	tons	39,800	
Avocados	tons		
Blueberries, Cultivated	1,000 pounds		
Blueberries, Wild (Maine)	1,000 pounds		
Cherries, Sweet	tons	319,900	362,000
Cherries, Tart	million pounds	352.7	290.2
Coffee (Hawaii)	1,000 pounds		
Cranberries	barrel	8,634,000	
Dates	tons		
Grapes	tons	7,659,000	
Kiwifruit (California)	tons		
Nectarines (California)	tons		
Olives (California)	tons		
Papayas (Hawaii)	1,000 pounds		
Peaches	tons	732,050	
Pears	tons	739,200	
Plums (California)	tons		
Prunes (California)	tons	80,000	110,000
Raspberries, all	1,000 pounds		
Strawberries	1,000 cwt	31,764.9	
Nuts and miscellaneous			
Almonds, shelled (California)	1,000 pounds	2,280,000	2,500,000
Hazelnuts, in-shell (Oregon)	tons	52,000	
Macadamias (Hawaii)	1,000 pounds		
Pecans, in-shell	1,000 pounds	278,900	
Pistachios (California)	1,000 pounds		
Walnuts, in-shell (California)	tons	690,000	

[1] Production years are 2017-2018 and 2018-2019.

Fruits and Nuts Production in Metric Units – United States: 2018 and 2019

[Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 2019 crop year, except citrus which is for the 2018-2019 season. Blank data cells indicate estimation period has not yet begun]

Crop	Production	
	2018	2019
	(metric tons)	(metric tons)
Citrus [1]		
Grapefruit	469,010	547,940
Lemons	805,580	772,920
Oranges	3,559,790	4,764,530
Tangerines and mandarins	729,380	840,960
Noncitrus		
Apples, commercial	5,194,630	
Apricots	36,110	
Avocados		
Blueberries, Cultivated		
Blueberries, Wild (Maine)		
Cherries, Sweet	290,210	328,400
Cherries, Tart	159,980	131,630
Coffee (Hawaii)		
Cranberries	391,630	
Dates		
Grapes	6,948,130	
Kiwifruit (California)		
Nectarines (California)		
Olives (California)		
Papayas (Hawaii)		
Peaches	664,100	
Pears	670,590	
Plums (California)		
Prunes (California)	72,570	99,790
Raspberries, all		
Strawberries	1,440,830	
Nuts and miscellaneous		
Almonds, shelled (California)	1,034,190	1,133,980
Hazelnuts, in-shell (Oregon)	47,170	
Macadamias (Hawaii)		
Pecans, in-shell	126,510	
Pistachios (California)		
Walnuts, in-shell (California)	625,960	

[1] Production years are 2017-2018 and 2018-2019.

Winter Wheat for Grain Objective Yield Data

The National Agricultural Statistics Service is conducting objective yield surveys in 10 winter wheat-producing States during 2019. 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.

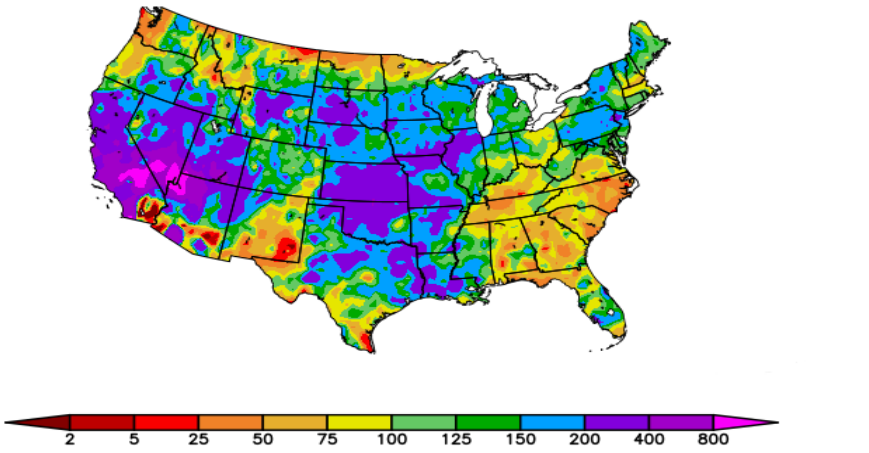
Winter Wheat Objective Yield Percent of Samples Processed in the Lab – United States: 2015-2019

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

Year	June	July	August
	Mature [1]	Mature [1]	Mature [1]
	(percent)	(percent)	(percent)
2015	16	64	93
2016	21	68	94
2017	28	69	93
2018	18	69	93
2019	8		

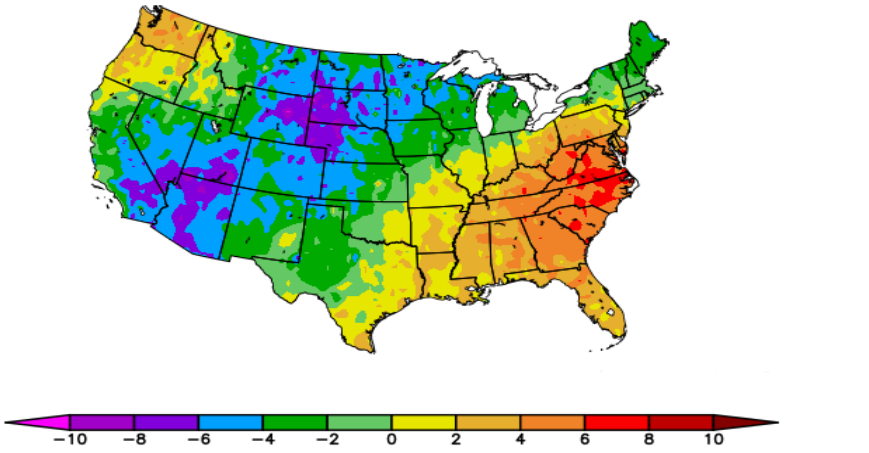
[1] Includes winter wheat in the hard dough stage or beyond and are considered mature or almost mature.

Percent of Normal Precipitation (%)
5/1/2019 – 5/31/2019



NOAA Regional Climate Centers

Departure from Normal Temperature (F)
5/1/2019 – 5/31/2019



NOAA Regional Climate Centers

May Weather Summary

Merciless rains pounded the Plains and Midwest, triggering new rounds of flooding and leading to a record-slow planting pace for the Nation's corn and soybeans. By June 2, only 67 percent of the corn and 39 percent of the soybeans had been planted, breaking the 1995 records of 77 and 40 percent, respectively. Late in the month, record flooding developed in the Arkansas River Basin, while rivers in parts of the middle Mississippi Valley surged to their second-highest levels on record, behind 1993.

The incessantly wet conditions across the Plains and the Midwest were accompanied by below-normal temperatures, leading to developmental delays and quality concerns with respect to winter wheat. Furthermore, late-planted summer crops were slow to emerge and become established amid the cool, rainy conditions.

Unseasonably wet weather extended into parts of the West, including California and the Great Basin. From California into the Four Corners States, cooler-than-normal conditions accompanied the frequent showers, slowing fieldwork and crop development. In contrast, warmer- and drier-than-normal weather stretched from the Pacific Northwest to the northernmost Rockies, resulting in some drought expansion.

Meanwhile, hot, dry weather developed in the Southeast, particularly in the southern Atlantic States, leading to significant reductions in soil moisture and increasing stress on summer crops, such as corn. A late-month Southeastern hot spell boosted temperatures to 100°F or higher in many locations, contributing to further drought intensification.

Elsewhere, showers that fell in the Nation's mid-section often swept into the Northeast, maintaining soggy conditions in the latter region. However, precipitation mostly bypassed some areas along the Canadian border, stretching as far east as northern Minnesota, leaving a sharp gradient between that area and saturated sections of the Plains and Midwest just to the south.

May Agricultural Summary

May was cooler than average for parts of California, the Corn Belt, Great Plains, New England, Rocky Mountains, and Southwest with temperatures averaging 4°F or more below normal. However, temperatures were warmer in the mid-Atlantic, Florida, southern Great Lakes, Mississippi Valley, and Pacific Northwest averaging 2°F or more above normal in some areas. The United States was wetter than normal for the month of May. Parts of the Corn Belt, Delta, and the Great Plains received more than 10 inches of rain during the month. However, the northern part of States along the Canadian border, as well as parts of the Pacific Southwest, Pacific Northwest, and Southeast remained dry.

By May 5, producers had planted 23 percent of the Nation's corn acreage, 13 percentage points behind the previous year and 23 percentage points behind the 5-year average. Six percent of the Nation's corn acreage had emerged by May 5, one percentage point behind the previous year and 7 percentage points behind the 5-year average. Producers had planted 49 percent of the Nation's corn acreage by May 19, twenty-nine percentage points behind the previous year and 31 percentage points behind the 5-year average. Nineteen percent of the Nation's corn acreage had emerged by May 19, twenty-eight percentage points behind the previous year and 30 percentage points behind the 5-year average. By June 2, producers had planted 67 percent of the Nation's corn acreage, 29 percentage points behind both the previous year and the 5-year average. Forty-six percent of the Nation's corn acreage had emerged by June 2, thirty-eight percentage points behind both the previous year and the 5-year average.

Producers had planted 6 percent of the Nation's soybean acreage by May 5, eight percentage points behind both the previous year and the 5-year average. Nineteen percent of the Nation's soybean acreage was planted by May 19, thirty-four percentage points behind the previous year and 28 percentage points behind the 5-year average. Five percent of the Nation's soybean acreage had emerged by May 19, nineteen percentage points behind the previous year and 12 percentage points behind the 5-year average. By June 2, thirty-nine percent of the Nation's soybean acreage was planted, 47 percentage points behind the previous year and 40 percentage points behind the 5-year average.

By May 5, twenty-nine percent of the Nation's 2019 winter wheat acreage had reached the headed stage, 2 percentage points behind the previous year and 12 percentage points behind the 5-year average. As of May 5, sixty-four percent of

this year's winter wheat acreage was reported in good to excellent condition, 30 percentage points above the same time last year. Fifty-four percent of the winter wheat acreage had reached the headed stage by May 19, five percentage points behind the previous year and 12 percentage points behind the 5-year average. By June 2, seventy-six percent of the Nation's winter wheat acreage had reached the headed stage, 6 percentage points behind the previous year and 8 percentage points behind the 5-year average. As of June 2, sixty-four percent of this year's winter wheat acreage was reported in good to excellent condition, 27 percentage points above the same time last year.

Nationwide, 18 percent of the 2019 cotton acreage had been planted by May 5, one percentage point behind both the previous year and the 5-year average. Forty-four percent of the cotton acreage had been planted by May 19, six percentage points behind the previous year and 1 percentage point behind the 5-year average. By June 2, seventy-one percent of the cotton acreage had been planted, 3 percentage points behind the previous year and 1 percentage point behind the 5-year average. Eight percent of the Nation's cotton acreage had reached the squaring stage by June 2, one percentage point behind the previous year but 1 percentage point ahead of the 5-year average. As of June 2, forty-six percent of this year's cotton acreage was rated in good to excellent condition, 4 percentage points above the same time last year.

Twenty-two percent of the Nation's sorghum acreage was planted by May 5, seven percentage points behind both the previous year and the 5-year average. Twenty-six percent of the Nation's sorghum acreage was planted by May 19, twelve percentage points behind both the previous year and the 5-year average. By June 2, thirty-five percent of the Nation's sorghum acreage was planted, 24 percentage points behind the previous year and 18 percentage points behind the 5-year average. Producers in Texas had planted 85 percent of the State's intended sorghum acreage by June 2, ten percentage points behind the previous year but identical to the 5-year average.

Producers had seeded 48 percent of the 2019 rice acreage by May 5, eighteen percentage points behind the previous year and 21 percentage points behind the 5-year average. By May 5, thirty-five percent of the Nation's acreage had emerged, 7 percentage points behind the previous year and 15 percentage points behind the 5-year average. Seventy-three percent of this year's rice acreage had been seeded by May 19, nineteen percentage points behind the previous year and 17 percentage points behind the 5-year average. By May 19, fifty-two percent of this year's rice acreage had emerged, 20 percentage points behind the previous year and 23 percentage points behind the 5-year average. By June 2, producers had seeded 91 percent of this year's rice acreage, 8 percentage points behind the previous year and 7 percentage points behind the 5-year average. By June 2, seventy-six percent of the rice acreage had emerged, 18 percentage points behind the previous year and 15 percentage points behind the 5-year average. As of June 2, sixty-one percent of the Nation's rice acreage was rated in good to excellent condition, 13 percentage points below the same time last year.

Nationally, oat producers had seeded 50 percent of the 2019 acreage by May 5, four percentage points behind the previous year and 22 percentage points behind the 5-year average. Thirty-six percent of the Nation's oat acreage had emerged by May 5, three percentage points ahead of the previous year but 15 percentage points behind the 5-year average. Oat producers had seeded 77 percent of this year's acreage by May 19, seven percentage points behind the previous year and 13 percentage points behind the 5-year average. Fifty-three percent of the oat acreage had emerged by May 19, eleven percentage points behind the previous year and 23 percentage points behind the 5-year average. By June 2, oat producers had seeded 91 percent of this year's acreage, 6 percentage points behind the previous year and 7 percentage points behind the 5-year average. Seventy-seven percent of the oat acreage had emerged by June 2, twelve percentage points behind the previous year and 16 percentage points behind the 5-year average. Twenty-three percent of this year's oat acreage had headed by June 2, seven percentage points behind the previous year and 10 percentage points behind the 5-year average. As of June 2, sixty-two percent of the Nation's oat acreage was rated in good to excellent condition, 3 percentage points below the same time last year.

Thirty-seven percent of the Nation's barley was planted by May 5, three percentage points behind the previous year and 19 percentage points behind the 5-year average. By May 5, twelve percent of the barley acreage had emerged, equal to the previous year but 15 percentage points behind the 5-year average. Seventy-six percent of this year's barley was planted by May 19, two percentage points behind the previous year and 8 percentage points behind the 5-year average. By May 19, thirty-nine percent of the barley acreage had emerged, 3 percentage points behind the previous year and 18 percentage points behind the 5-year average. Ninety-four percent of this year's barley was planted by June 2, two percentage points behind the previous year and 3 percentage points behind the 5-year average. By June 2, seventy-three percent of the barley acreage had emerged, 7 percentage points behind the previous year and 12 percentage points behind the 5-year average.

As of June 2, eighty-eight percent of the this year's barley acreage was rated in good to excellent condition, 9 percentage points above the same time last year.

By May 5, twenty-two percent of the Nation's spring wheat acreage was seeded, 5 percentage points behind the previous year and 27 percentage points behind the 5-year average. Four percent of the spring wheat acreage had emerged by May 5, equal to the previous year but 15 percentage points behind the 5-year average. Seventy percent of this year's spring wheat acreage was seeded by May 19, six percentage points behind the previous year and 10 percentage points behind the 5-year average. Twenty-six percent of the spring wheat acreage had emerged at that time, 8 percentage points behind the previous year and 25 percentage points behind the 5-year average. By June 2, ninety-three percent of the spring wheat acreage was seeded, 3 percentage points behind both the previous year and the 5-year average. Sixty-nine percent of the spring wheat acreage had emerged at that time, 9 percentage points behind the previous year and 15 percentage points behind the 5-year average. As of June 2, eighty-three percent of this year's spring wheat acreage was rated in good to excellent condition, 13 percentage points above the same time last year.

Nationally, peanut producers had planted 22 percent of the 2019 peanut acreage by May 5, one percentage point ahead of the previous year and 3 percentage points ahead of the 5-year average. By May 19, peanut producers had planted 63 percent of this year's peanut acreage, 3 percentage points ahead of the previous year and 8 percentage points ahead of the 5-year average. Peanut producers had planted 86 percent of this year's peanut acreage by June 2, four percentage points ahead of the previous year and 1 percentage point ahead of the 5-year average. As of June 2, sixty-one percent of the Nation's peanut acreage was rated in good to excellent condition, 2 percentage points above the same time last year.

By May 5, thirty-one percent of the sugarbeet acreage was planted, 29 percentage points behind the previous year and 36 percentage points behind the 5-year average. By June 2, ninety-seven percent of the sugarbeet acreage was planted, 3 percentage points behind both the previous year and the 5-year average.

Three percent of the Nation's intended 2019 sunflower acreage was planted by May 19, seven percentage points behind the previous year and 9 percentage points behind the 5-year average. By June 2, nineteen percent of this year's sunflower acreage was planted, 27 percentage points behind the previous year and 25 percentage points behind the 5-year average. Planting progress was behind the 5-year average pace in all estimating States at that time and had not yet begun in South Dakota.

Crop Comments

Winter wheat: Production is forecast at 1.27 billion bushels, up less than 1 percent from the May 1 forecast and up 8 percent from 2018. As of June 1, the United States yield is forecast at 50.5 bushels per acre, up 0.2 bushel from last month and up 2.6 bushels from last year's average yield of 47.9 bushels per acre. As of June 2, sixty-four percent of the winter wheat acreage in the 18 major producing States was rated in good to excellent condition, 27 percentage points higher than at the same time last year. Nationally, 76 percent of the winter wheat crop was headed by June 2, eight percentage points lower than the 5-year average pace. If realized, the 2019 United States winter wheat yield will be the second highest on record.

Forecasted head counts from the objective yield survey in the six Hard Red Winter States (Colorado, Kansas, Montana, Nebraska, Oklahoma, and Texas) are above last year's level in Colorado, Kansas, Nebraska, Oklahoma, and Texas but below in Montana. As of June 2, Kansas, Oklahoma, and Texas winter wheat was rated 57 percent, 64 percent, and 64 percent, in good to excellent condition, respectively. In the Low Plains of Texas, harvest was underway. Conditions were favorable in the Blacklands, South Central Texas, and the Edwards Plateau for harvest.

Forecasted head counts from the objective yield survey in the three Soft Red Winter States (Illinois, Missouri, and Ohio) are below last year's levels in Illinois and Ohio but above last year's levels in Missouri. As of June 2, Illinois, Missouri, and Ohio winter wheat was rated 75 percent, 84 percent, and 62 percent, in fair to good condition, respectively.

Forecasted head counts from the objective yield survey in Washington are below last year. As of June 2, Idaho, Oregon, and Washington winter wheat was rated 71 percent, 63 percent, and 73 percent, in good to excellent condition, respectively. Warmer conditions in some Washington counties, advanced the crop but put heat stress on wheat acreage.

Durum wheat: Production of Durum wheat in Arizona and California is forecast at a collective 7.97 million bushels, down 2 percent from last month and down 25 percent from 2018. In Arizona, 33 percent of the acreage was harvested by June 2, five percentage points ahead of last year and 12 percentage points ahead of the 5-year average. Ninety-four percent of the Arizona acreage was in good to excellent condition on June 2, fifteen percentage points above the same time last year.

Grapefruit: The United States 2018-2019 grapefruit crop is forecast at 604,000 tons, down slightly from last month but up 17 percent from last season's final utilization. In Florida, expected production, at 4.51 million boxes (192,000 tons), is down 2 percent from last month but up 16 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 927,000 tons, down slightly from last month but up 15 percent from last season's final utilization. The Florida forecast, at 990,000 boxes (47,000 tons), is down 1 percent from last month but up 32 percent from the previous year. The California tangerine and mandarin forecast was carried forward from the previous month.

Prunes (dried plums): California's 2019 prune production is forecast at 110,000 dried tons, up 38 percent from last year. Good growing conditions were reported, resulting in a successful bloom and a good fruit set.

Cherries, Tart: United States tart cherry production is forecast at 290 million pounds, down 18 percent from the 2018 production.

In Michigan, the largest tart cherry producing State, growers reported an average crop. Cooler than normal spring weather conditions led to a delay in the crop. Utah growers reported an above average crop similar to the previous year. In New York, growers reported an average crop and bloom. In Washington, growers reported warm spring weather conditions and expect harvest to begin later than normal. In Wisconsin, cool and wet conditions led to a delay in the crop this year.

Cherries, Sweet: United States sweet cherry production is forecast at 362,000 tons, up 13 percent from 2018.

In Washington and Oregon, warm spring conditions have been optimal for the crop. In California, growers reported sufficient chill and precipitation leading to a good crop this season.

Sweet cherry estimates were discontinued in Michigan.

Maple syrup: The 2019 United States maple syrup production totaled 4.24 million gallons, up 1 percent from the revised previous year. The number of taps totaled 13.3 million, down 4 percent from the 2018 total. Yield per tap was 0.318 gallon, up 0.015 gallon from the previous season.

The earliest sap flow reported was January 5 in New York. The latest sap flow reported to open the season was March 1 in Wisconsin. On average, the season lasted 30 days, compared with 42 days in 2018. The 2018 United States average price per gallon was $33.80, up $0.70 from 2017. Value of production, at $142 million for 2018, was down 2 percent from the previous season.

Beginning in 2019, maple syrup estimates were discontinued for Connecticut, Indiana, Massachusetts, Minnesota, Ohio, and West Virginia.

Statistical Methodology

Wheat survey procedures: Objective yield and farm operator surveys were conducted between May 25 and June 6 to gather information on expected yield as of June 1. The objective yield survey was conducted in 10 States that accounted for 70 percent of the 2018 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 3,400 producers were interviewed during the survey period and asked questions about the probable yield on their operation. These growers will continue to be surveyed throughout the growing season to provide indications of average yields.

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

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

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

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

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

The “Root Mean Square Error” for the June 1 winter wheat production forecast is 4.8 percent. This means that chances are 2 out of 3 that the current winter wheat production will not be above or below the final estimate by more than 4.8 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 8.3 percent. Differences between the June 1 winter wheat production forecast and the final estimate during the past 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.

The “Root Mean Square Error” for the June 1 orange production forecast is 1.7 percent. However, if you exclude the four abnormal production seasons (one freeze season and three hurricane seasons), the “Root Mean Square Error” is 1.9 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 1.7 percent, or 1.9 percent when excluding abnormal seasons. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 2.9 percent, or 3.2 percent when excluding abnormal seasons.

Changes between the June 1 orange forecast and the final estimates during the past 20 years have averaged 104,000 tons (120,000 tons, excluding abnormal seasons), ranging from 5,000 tons to 272,000 tons (23,000 tons to 272,000 tons excluding abnormal seasons). The June 1 forecast for oranges has been below the final estimate 10 times and above 10 times (below 6 times and above 10 times, excluding abnormal seasons). The difference does not imply that the June 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

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David Colwell – Current Agricultural Industrial Reports ..... (202) 720-3338
Chris Hawthorn – Corn, Flaxseed, Proso Millet ..... (202) 720-9526
James Johanson – County Estimates, Hay ..... (202) 690-8533
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Sammy Neal – Peanuts, Rice ..... (202) 720-7688
Jannety Mosley – Crop Weather, Barley ..... (202) 720-7621
Jean Porter – Rye, Wheat ..... (202) 720-8068
Chris Singh – Cotton, Cotton Ginnings, Sorghum ..... (202) 720-5944
Travis Thorson – Sunflower, Other Oilseeds ..... (202) 720-7369

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Vincent Davis – Dry Beans, Garlic, Hazelnuts, Honeydews, Kiwifruit, Lettuce, Maple Syrup, Mint, Pears, Sweet Cherries, Tart Cherries, Tomatoes ..... (202) 720-2157
Fleming Gibson – Cauliflower, Celery, Grapefruit, Lemons, Macadamia, Mandarins and tangerines, Mushrooms, Olives, Oranges ..... (202) 720-5412
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Daphne Schauber – Avocados, Bell Peppers, Broccoli, Cabbage, Chickpeas, Chile Peppers, Dates, Floriculture, Grapes, Hops, Pecans ..... (202) 720-4215

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