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Corn Planted Acreage Up 3 Percent from 2018
Soybean Acreage Down 10 Percent
All Wheat Acreage Down 5 Percent
All Cotton Acreage Down 3 Percent

Corn planted area for all purposes in 2019 is estimated at 91.7 million acres, up 3 percent from last year. Compared with last year, planted acres are up or unchanged in 40 of the 48 estimating States. Area harvested for grain, at 83.6 million acres, is up 2 percent from last year.

Soybean planted area for 2019 is estimated at 80.0 million acres, down 10 percent from last year. This represents the lowest soybean planted acreage in the United States since 2013. Compared with last year, planted acreage is down in all 29 estimating States.

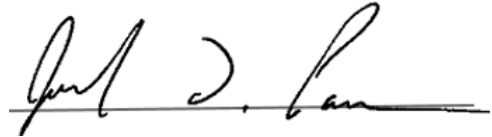
All wheat planted area for 2019 is estimated at 45.6 million acres, down 5 percent from 2018. This represents the lowest all wheat planted area on record since records began in 1919. The 2019 winter wheat planted area, at 31.8 million acres, is down 2 percent from last year but up 1 percent from the previous estimate. Of this total, about 22.7 million acres are Hard Red Winter, 5.54 million acres are Soft Red Winter, and 3.55 million acres are White Winter. Area planted to other spring wheat for 2019 is estimated at 12.4 million acres, down 6 percent from 2018. Of this total, about 12.0 million acres are Hard Red Spring wheat. Durum planted area for 2019 is estimated at 1.40 million acres, down 32 percent from the previous year.

All cotton planted area for 2019 is estimated at 13.7 million acres, 3 percent below last year. Upland area is estimated at 13.4 million acres, down 3 percent from 2018. American Pima area is estimated at 275,000 acres, up 10 percent from 2018.

This report was approved on June 28, 2019.



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Principal Crops Area Planted – States and United States: 2017-2019

[Crops included in area planted are corn, sorghum, oats, barley, rye, winter wheat, Durum wheat, other spring wheat, rice, soybeans, peanuts, sunflower, cotton, dry edible beans, chickpeas, potatoes, sugarbeets, canola, and proso millet. Harvested acreage is used for all hay, tobacco, and sugarcane in computing total area planted. Includes double cropped acres and unharvested small grains planted as cover crops]

State	2017 (1,000 acres)	2018 (1,000 acres)	2019 (1,000 acres)
Alabama	2,280	2,330	2,170
Alaska ¹	(X)	28	26
Arizona	700	648	641
Arkansas	7,299	7,292	7,024
California	3,096	2,941	2,855
Colorado	6,245	6,148	6,176
Connecticut	72	70	77
Delaware	462	453	449
Florida	1,146	1,119	1,047
Georgia	3,634	3,653	3,250
Idaho	4,205	4,187	4,016
Illinois	22,851	22,936	22,455
Indiana	12,130	12,120	11,690
Iowa	24,491	24,291	23,995
Kansas	23,633	23,465	23,049
Kentucky	5,956	5,753	5,983
Louisiana	3,275	3,287	3,165
Maine	226	229	220
Maryland	1,633	1,572	1,625
Massachusetts	93	93	85
Michigan	6,349	6,410	6,225
Minnesota	19,691	19,534	18,903
Mississippi	4,159	4,144	4,055
Missouri	13,533	13,782	13,093
Montana	9,079	9,835	9,532
Nebraska	19,566	19,792	19,194
Nevada	426	401	429
New Hampshire	59	52	59
New Jersey	310	311	293
New Mexico	906	869	822
New York	2,800	2,854	2,782
North Carolina	4,428	4,593	4,303
North Dakota	23,617	24,163	23,646
Ohio	10,010	10,015	9,490
Oklahoma	9,827	10,036	9,974
Oregon	2,080	2,003	2,007
Pennsylvania	3,728	3,493	3,636
Rhode Island	8	8	9
South Carolina	1,544	1,498	1,530
South Dakota	17,422	17,300	15,146
Tennessee	4,841	4,916	4,950
Texas	21,580	21,830	20,716
Utah	944	871	907
Vermont	267	255	247
Virginia	2,674	2,634	2,608
Washington	3,634	3,702	3,557
West Virginia	652	616	546
Wisconsin	7,781	7,997	7,991
Wyoming	1,510	1,473	1,513
United States ²	318,340	319,579	309,312

(X) Not applicable.

¹ Data included in principal crop total beginning in 2018.

² States do not add to United States due to potatoes and rye unallocated acreage. Alaska data included in United States total beginning in 2018.

**Corn Area Planted for All Purposes and Harvested for Grain – States and United States:
2018 and 2019**

State	Area planted for all purposes		Area harvested for grain	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alabama	260	320	250	305
Arizona	70	85	15	41
Arkansas	660	810	645	780
California	430	450	65	95
Colorado	1,470	1,470	1,200	1,200
Connecticut ²	23	25	(NA)	(NA)
Delaware	170	200	166	190
Florida	100	80	65	45
Georgia	325	350	285	310
Idaho	360	340	135	110
Illinois	11,000	11,000	10,850	10,800
Indiana	5,350	5,500	5,200	5,300
Iowa	13,200	13,600	12,800	13,200
Kansas	5,450	5,900	5,000	5,530
Kentucky	1,340	1,650	1,230	1,550
Louisiana	460	570	450	550
Maine ²	31	32	(NA)	(NA)
Maryland	450	500	390	430
Massachusetts ²	14	15	(NA)	(NA)
Michigan	2,300	2,300	1,940	1,950
Minnesota	7,900	8,000	7,490	7,500
Mississippi	480	590	465	560
Missouri	3,500	3,400	3,330	3,200
Montana	115	130	68	70
Nebraska	9,600	10,000	9,310	9,650
Nevada ²	13	14	(NA)	(NA)
New Hampshire ²	13	14	(NA)	(NA)
New Jersey	72	77	61	63
New Mexico	135	120	35	35
New York	1,100	1,120	645	590
North Carolina	910	970	830	890
North Dakota	3,150	3,700	2,930	3,450
Ohio	3,500	3,300	3,300	3,050
Oklahoma	320	350	280	305
Oregon	80	100	45	65
Pennsylvania	1,350	1,400	950	960
Rhode Island ²	2	2	(NA)	(NA)
South Carolina	340	410	310	370
South Dakota	5,300	4,800	4,860	4,320
Tennessee	740	1,000	690	950
Texas	2,200	2,200	1,750	1,800
Utah	70	80	22	27
Vermont ²	85	89	(NA)	(NA)
Virginia	485	530	325	370
Washington	165	160	85	80
West Virginia	46	52	33	39
Wisconsin	3,900	3,800	3,170	2,800
Wyoming	95	95	70	65
United States	89,129	91,700	81,740	83,595

(NA) Not available.

¹ Forecasted.

² Area harvested for grain not estimated.

Sorghum Area Planted for All Purposes and Harvested for Grain – States and United States: 2018 and 2019

State	Area planted for all purposes		Area harvested for grain	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Arkansas ²	12	(NA)	10	(NA)
Colorado	355	350	325	310
Georgia ²	25	(NA)	15	(NA)
Illinois ²	18	(NA)	16	(NA)
Kansas	2,800	2,650	2,650	2,450
Louisiana ²	8	(NA)	6	(NA)
Mississippi ²	4	(NA)	3	(NA)
Missouri ²	30	(NA)	21	(NA)
Nebraska	230	230	170	165
New Mexico ²	80	(NA)	47	(NA)
North Carolina ²	18	(NA)	8	(NA)
Oklahoma	300	280	240	250
South Dakota	260	215	200	160
Texas	1,550	1,400	1,350	1,250
United States	5,690	5,125	5,061	4,585

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Oat Area Planted and Harvested – States and United States: 2018 and 2019

[Includes area planted in preceding fall]

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alabama ²	40	(NA)	15	(NA)
Arkansas	10	5	7	3
California	110	90	6	9
Colorado ²	95	(NA)	7	(NA)
Georgia	60	70	15	25
Idaho	40	55	10	10
Illinois	40	45	25	20
Iowa	135	215	33	80
Kansas	120	135	18	25
Maine	21	21	19	20
Michigan	75	55	50	35
Minnesota	180	240	105	110
Missouri	35	30	16	10
Montana	70	60	23	30
Nebraska	125	85	22	19
New York	69	60	43	35
North Carolina	30	23	11	9
North Dakota	300	270	105	110
Ohio	55	60	30	35
Oklahoma	50	75	10	11
Oregon	20	20	5	8
Pennsylvania	65	80	35	50
South Carolina ²	19	(NA)	7	(NA)
South Dakota	290	210	95	85
Texas	450	400	50	40
Washington ²	17	(NA)	4	(NA)
Wisconsin	200	245	90	130
Wyoming ²	25	(NA)	9	(NA)
United States	2,746	2,549	865	909

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Barley Area Planted and Harvested – States and United States: 2018 and 2019

[Includes area planted in preceding fall]

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alaska	5	6	4	5
Arizona	12	20	9	15
California	65	70	26	48
Colorado	58	80	52	77
Delaware	25	27	14	18
Idaho	550	510	530	485
Kansas	17	15	6	9
Maine	17	17	16	16
Maryland	45	70	24	50
Michigan	20	15	5	10
Minnesota	80	90	67	77
Montana	790	880	600	705
New York	10	12	8	10
North Carolina	11	12	8	7
North Dakota	470	620	385	535
Oregon	43	42	26	23
Pennsylvania	45	40	33	31
South Dakota	48	48	13	11
Utah	21	22	16	13
Virginia	30	35	9	9
Washington	85	105	67	93
Wisconsin	25	26	10	8
Wyoming	71	95	50	76
United States	2,543	2,857	1,978	2,331

¹ Forecasted.

All Wheat Area Planted and Harvested – States and United States: 2018 and 2019

[Includes area planted in preceding fall]

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alabama	160	150	110	85
Arizona	91	45	74	44
Arkansas	175	100	95	60
California	420	426	143	177
Colorado	2,260	2,300	1,954	2,150
Delaware	75	60	45	45
Florida ²	15	(NA)	10	(NA)
Georgia	200	180	70	60
Idaho	1,191	1,215	1,136	1,145
Illinois	600	640	560	590
Indiana	310	320	260	260
Iowa ²	16	(NA)	6	(NA)
Kansas	7,700	7,100	7,300	6,600
Kentucky	450	460	300	320
Louisiana ²	15	(NA)	10	(NA)
Maryland	360	355	200	165
Michigan	510	550	470	490
Minnesota	1,621	1,530	1,575	1,480
Mississippi	55	40	30	20
Missouri	740	620	520	470
Montana	5,390	5,150	5,165	4,935
Nebraska	1,100	1,070	1,010	970
Nevada ²	23	(NA)	8	(NA)
New Jersey	18	18	15	14
New Mexico	315	350	105	120
New York	110	110	95	90
North Carolina	460	300	370	225
North Dakota	7,735	7,290	7,635	7,155
Ohio	490	470	450	420
Oklahoma	4,400	4,400	2,500	2,750
Oregon	800	740	770	730
Pennsylvania	195	210	145	150
South Carolina	80	95	65	75
South Dakota	1,883	1,650	1,628	1,500
Tennessee	380	300	285	225
Texas	4,500	4,500	1,750	2,200
Utah	130	125	103	115
Virginia	230	180	155	115
Washington	2,220	2,220	2,165	2,175
West Virginia ²	7	(NA)	3	(NA)
Wisconsin	240	210	200	170
Wyoming	130	130	115	110
United States	47,800	45,609	39,605	38,405

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Winter Wheat Area Planted and Harvested – States and United States: 2018 and 2019

[Includes area planted in preceding fall]

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alabama	160	150	110	85
Arizona ²	20	(NA)	4	(NA)
Arkansas	175	100	95	60
California	380	375	110	135
Colorado	2,250	2,300	1,950	2,150
Delaware	75	60	45	45
Florida ²	15	(NA)	10	(NA)
Georgia	200	180	70	60
Idaho	720	730	680	680
Illinois	600	640	560	590
Indiana	310	320	260	260
Iowa ²	16	(NA)	6	(NA)
Kansas	7,700	7,100	7,300	6,600
Kentucky	450	460	300	320
Louisiana ²	15	(NA)	10	(NA)
Maryland	360	355	200	165
Michigan	510	550	470	490
Minnesota ²	11	(NA)	5	(NA)
Mississippi	55	40	30	20
Missouri	740	620	520	470
Montana	1,650	1,950	1,570	1,850
Nebraska	1,100	1,070	1,010	970
Nevada ²	13	(NA)	5	(NA)
New Jersey	18	18	15	14
New Mexico	315	350	105	120
New York	110	110	95	90
North Carolina	460	300	370	225
North Dakota	85	90	70	75
Ohio	490	470	450	420
Oklahoma	4,400	4,400	2,500	2,750
Oregon	720	740	695	730
Pennsylvania	195	210	145	150
South Carolina	80	95	65	75
South Dakota	830	850	660	730
Tennessee	380	300	285	225
Texas	4,500	4,500	1,750	2,200
Utah	120	125	94	115
Virginia	230	180	155	115
Washington	1,700	1,700	1,650	1,660
West Virginia ²	7	(NA)	3	(NA)
Wisconsin	240	210	200	170
Wyoming	130	130	115	110
United States	32,535	31,778	24,742	24,924

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Durum Wheat Area Planted and Harvested – States and United States: 2018 and 2019

[Includes area planted in preceding fall in Arizona and California]

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Arizona	71	45	70	44
California	40	51	33	42
Idaho	11	5	11	5
Montana	840	600	775	585
North Dakota	1,100	700	1,075	680
South Dakota ²	3	(NA)	3	(NA)
United States	2,065	1,401	1,967	1,356

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Other Spring Wheat Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Colorado ²	10	(NA)	4	(NA)
Idaho	460	480	445	460
Minnesota	1,610	1,530	1,570	1,480
Montana	2,900	2,600	2,820	2,500
Nevada ²	10	(NA)	3	(NA)
North Dakota	6,550	6,500	6,490	6,400
Oregon ²	80	(NA)	75	(NA)
South Dakota	1,050	800	965	770
Utah ²	10	(NA)	9	(NA)
Washington	520	520	515	515
United States	13,200	12,430	12,896	12,125

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Rye Area Planted and Harvested – States and United States: 2018 and 2019

[Includes area planted in preceding fall]

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Georgia ²	190	(D)	15	(D)
Minnesota	(D)	60	(D)	20
North Dakota	(D)	60	(D)	30
Oklahoma	240	280	50	45
Pennsylvania	(D)	135	(D)	20
Wisconsin	(D)	190	(D)	15
Other States ³	1,581	1,150	208	168
United States	2,011	1,875	273	298

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

¹ Forecasted.

² Beginning in 2019, estimates included in Other States.

³ In 2018, Other States include Illinois, Kansas, Maine, Maryland, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, North Dakota, Pennsylvania, South Carolina, South Dakota, Texas, Virginia, and Wisconsin. Beginning in 2019, Other States include Georgia, Illinois, Kansas, Michigan, Nebraska, New York, North Carolina, South Dakota, and Texas.

Rice Area Planted and Harvested by Class – States and United States: 2018 and 2019

Class and State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Long grain				
Arkansas	1,250	1,140	1,245	1,125
California	11	7	11	7
Louisiana	395	380	392	376
Mississippi	140	150	139	149
Missouri	215	185	211	180
Texas	187	195	183	190
United States	2,198	2,057	2,181	2,027
Medium grain				
Arkansas	190	160	181	150
California	455	445	453	442
Louisiana	45	40	44	39
Missouri	9	8	9	8
Texas	8	5	6	4
United States	707	658	693	643
Short grain²				
Arkansas	1	1	1	1
California	40	40	40	40
United States	41	41	41	41
All				
Arkansas	1,441	1,301	1,427	1,276
California	506	492	504	489
Louisiana	440	420	436	415
Mississippi	140	150	139	149
Missouri	224	193	220	188
Texas	195	200	189	194
United States	2,946	2,756	2,915	2,711

¹ Forecasted.

² Includes sweet rice.

Proso Millet Area Planted and Harvested – States and United States: 2018 and 2019

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

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Colorado	300	310	275	
Nebraska	95	90	89	
South Dakota	48	33	39	
United States	443	433	403	

¹ Estimates to be released January 2020 in the *Crop Production Summary*.

Hay Area Harvested by Type – States and United States: 2018 and 2019

State	All hay		Alfalfa and alfalfa mixtures		All other	
	2018	2019 ¹	2018	2019 ¹	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alabama ²	850	760	(NA)	(NA)	850	760
Alaska ²	22	20	(NA)	(NA)	22	20
Arizona	300	325	260	285	40	40
Arkansas	1,203	1,183	3	3	1,200	1,180
California	980	890	620	560	360	330
Colorado	1,420	1,460	730	730	690	730
Connecticut	47	52	7	7	40	45
Delaware	13	12	4	3	9	9
Florida ²	280	270	(NA)	(NA)	280	270
Georgia ²	600	580	(NA)	(NA)	600	580
Idaho	1,340	1,260	1,050	1,020	290	240
Illinois	470	470	250	240	220	230
Indiana	510	570	240	270	270	300
Iowa	940	1,080	620	700	320	380
Kansas	2,360	2,260	610	560	1,750	1,700
Kentucky	1,895	2,115	145	115	1,750	2,000
Louisiana ²	380	390	(NA)	(NA)	380	390
Maine	110	100	10	10	100	90
Maryland	195	190	40	35	155	155
Massachusetts	79	70	9	10	70	60
Michigan	810	800	590	570	220	230
Minnesota	1,220	1,300	720	850	500	450
Mississippi ²	590	600	(NA)	(NA)	590	600
Missouri	3,070	3,180	270	280	2,800	2,900
Montana	2,900	2,900	1,900	2,000	1,000	900
Nebraska	2,700	2,500	850	900	1,850	1,600
Nevada	365	415	185	215	180	200
New Hampshire	39	45	4	5	35	40
New Jersey	114	98	9	8	105	90
New Mexico	250	270	160	170	90	100
New York	1,220	1,210	300	290	920	920
North Carolina	816	816	6	6	810	810
North Dakota	2,670	2,650	1,470	1,350	1,200	1,300
Ohio	970	960	350	320	620	640
Oklahoma	3,230	3,300	230	200	3,000	3,100
Oregon	1,000	1,050	420	430	580	620
Pennsylvania	1,190	1,135	300	315	890	820
Rhode Island	6	7	1	1	5	6
South Carolina ²	270	300	(NA)	(NA)	270	300
South Dakota	3,250	3,250	1,750	1,800	1,500	1,450
Tennessee	1,720	1,768	20	18	1,700	1,750
Texas	4,740	4,465	140	165	4,600	4,300
Utah	650	680	500	530	150	150
Vermont	170	158	20	18	150	140
Virginia	1,140	1,145	40	45	1,100	1,100
Washington	760	680	350	320	410	360
West Virginia	535	494	15	14	520	480
Wisconsin	1,360	1,400	820	850	540	550
Wyoming	1,090	1,140	590	610	500	530
United States	52,839	52,773	16,608	16,828	36,231	35,945

(NA) Not available.

¹ Forecasted.

² Alfalfa and alfalfa mixtures included in all other hay.

Soybean Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alabama	345	280	340	275
Arkansas	3,280	3,000	3,240	2,950
Delaware	170	150	168	148
Florida ²	18	(NA)	12	(NA)
Georgia	145	110	135	105
Illinois	10,800	10,300	10,750	10,240
Indiana	5,950	5,300	5,920	5,280
Iowa	10,000	9,100	9,910	9,030
Kansas	4,750	4,700	4,700	4,650
Kentucky	2,000	1,700	1,990	1,690
Louisiana	1,340	1,050	1,200	1,010
Maryland	520	510	515	505
Michigan	2,300	2,100	2,280	2,090
Minnesota	7,800	6,900	7,710	6,830
Mississippi	2,230	1,950	2,190	1,920
Missouri	5,850	5,300	5,800	5,230
Nebraska	5,700	5,000	5,650	4,950
New Jersey	105	100	103	98
New York	330	270	320	265
North Carolina	1,650	1,500	1,570	1,490
North Dakota	6,900	5,900	6,860	5,850
Ohio	5,000	4,700	4,980	4,690
Oklahoma	630	520	600	500
Pennsylvania	640	630	630	625
South Carolina	390	350	375	340
South Dakota	5,650	4,400	5,580	4,360
Tennessee	1,700	1,500	1,670	1,470
Texas	175	100	135	85
Virginia	600	570	590	560
West Virginia ²	28	(NA)	27	(NA)
Wisconsin	2,200	2,050	2,160	2,030
United States	89,196	80,040	88,110	79,266

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Percent of Soybean Acreage Planted Following Another Harvested Crop – Selected States and United States: 2015-2019

[Data as obtained from area frame samples. These data do not represent official estimates of the Agricultural Statistics Board but provide raw data as obtained from survey respondents. The purpose of these data is to portray trends in soybean production practices]

State	2015	2016	2017	2018	2019
	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	46	36	16	23	24
Arkansas	9	4	3	3	2
Delaware	45	50	42	34	6
Florida ¹	54	(D)	(D)	(Z)	(X)
Georgia	40	44	40	38	18
Illinois	4	3	4	3	5
Indiana	3	3	2	2	2
Kansas	9	9	8	6	4
Kentucky	23	25	21	25	26
Louisiana	4	(Z)	(Z)	1	1
Maryland	42	33	30	27	23
Mississippi	3	2	1	3	1
Missouri	10	9	7	5	8
New Jersey	20	8	4	27	6
North Carolina	41	26	30	35	26
Ohio	1	1	1	2	1
Oklahoma	48	28	28	39	37
Pennsylvania	17	20	18	11	14
South Carolina	41	21	21	36	24
Tennessee	31	31	28	27	20
Texas	17	(Z)	(Z)	(Z)	(Z)
Virginia	37	34	40	51	50
West Virginia ¹	(Z)	27	10	2	(X)
United States	6	5	4	5	4

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

(X) Not applicable.

(Z) Less than half of the unit shown.

¹ Estimates discontinued in 2019.

Peanut Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Alabama	165.0	150.0	162.0	147.0
Arkansas	26.0	45.0	23.0	44.0
Florida	155.0	145.0	140.0	135.0
Georgia	665.0	600.0	650.0	590.0
Mississippi	25.0	25.0	24.0	24.0
New Mexico	5.5	5.0	5.5	5.0
North Carolina	102.0	100.0	98.0	98.0
Oklahoma	16.0	14.0	15.0	13.0
South Carolina	87.0	65.0	82.0	62.0
Texas	155.0	190.0	145.0	180.0
Virginia	24.0	25.0	24.0	25.0
United States	1,425.5	1,364.0	1,368.5	1,323.0

¹ Forecasted.

Sunflower Area Planted and Harvested by Type – States and United States: 2018 and 2019

Varietal type and State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Oil				
California	58.0	50.0	57.0	49.5
Colorado	58.0	70.0	49.0	63.0
Kansas	43.0	60.0	41.0	56.0
Minnesota	45.0	45.0	44.0	44.0
Nebraska	25.0	25.0	24.0	24.0
North Dakota	395.0	440.0	380.0	425.0
South Dakota	520.0	500.0	485.0	485.0
Texas	20.0	35.0	19.0	32.0
United States	1,164.0	1,225.0	1,099.0	1,178.5
Non-oil				
California	2.0	2.0	2.0	2.0
Colorado	8.0	17.0	7.0	15.0
Kansas	10.0	15.0	8.5	14.0
Minnesota	7.5	6.0	7.0	5.5
Nebraska	12.0	10.0	9.5	9.0
North Dakota	41.0	60.0	40.0	57.0
South Dakota	51.0	40.0	45.0	37.0
Texas	5.5	5.0	4.5	4.0
United States	137.0	155.0	123.5	143.5
All				
California	60.0	52.0	59.0	51.5
Colorado	66.0	87.0	56.0	78.0
Kansas	53.0	75.0	49.5	70.0
Minnesota	52.5	51.0	51.0	49.5
Nebraska	37.0	35.0	33.5	33.0
North Dakota	436.0	500.0	420.0	482.0
South Dakota	571.0	540.0	530.0	522.0
Texas	25.5	40.0	23.5	36.0
United States	1,301.0	1,380.0	1,222.5	1,322.0

¹ Forecasted.

Canola Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Idaho ²	43.0	(NA)	42.0	(NA)
Kansas	47.0	29.0	35.0	25.0
Minnesota	46.0	59.0	45.0	57.0
Montana	120.0	120.0	117.0	115.0
North Dakota	1,590.0	1,700.0	1,580.0	1,690.0
Oklahoma	70.0	35.0	53.0	28.0
Oregon ²	4.7	(NA)	4.5	(NA)
Washington	70.0	75.0	67.0	71.0
United States	1,990.7	2,018.0	1,943.5	1,986.0

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Flaxseed Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Montana	39	65	37	58
North Dakota	165	290	158	282
South Dakota ²	4	(NA)	3	(NA)
United States	208	355	198	340

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Safflower Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
California	60.0	60.0	59.5	59.5
Idaho	22.0	27.0	21.0	26.0
Montana	42.0	30.0	36.0	27.0
North Dakota ²	10.0	(NA)	9.5	(NA)
South Dakota	18.5	21.0	17.4	19.0
Utah	15.0	15.0	13.0	14.0
United States	167.5	153.0	156.4	145.5

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Other Oilseeds Area Planted and Harvested – United States: 2018 and 2019

Crop	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Rapeseed ²	5.7	14.8	5.4	14.0
Mustard seed ³	102.5	110.0	97.5	104.5

¹ Forecasted.

² For 2018, rapeseed program States include Idaho, Montana, North Carolina, North Dakota, Oregon, and Washington. For 2019, rapeseed program States include Delaware, Idaho, Kentucky, North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia.

³ For 2018, mustard seed program States include Idaho, Montana, North Dakota, Oregon, and Washington. For 2019, mustard seed program States include Idaho, Montana, and North Dakota.

Cotton Area Planted and Harvested by Type – States and United States: 2018 and 2019

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

Type and State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Upland				
Alabama	510.0	510.0	497.0	
Arizona	160.0	155.0	159.0	
Arkansas	485.0	580.0	480.0	
California	48.0	40.0	47.0	
Florida	117.0	120.0	93.0	
Georgia	1,430.0	1,350.0	1,305.0	
Kansas	165.0	185.0	152.0	
Louisiana	195.0	260.0	189.0	
Mississippi	620.0	700.0	615.0	
Missouri	325.0	370.0	322.0	
New Mexico	77.0	70.0	56.0	
North Carolina	430.0	460.0	415.0	
Oklahoma	780.0	720.0	550.0	
South Carolina	300.0	300.0	275.0	
Tennessee	360.0	370.0	355.0	
Texas	7,750.0	7,150.0	4,350.0	
Virginia	98.0	105.0	97.0	
United States	13,850.0	13,445.0	9,957.0	
American Pima				
Arizona	14.5	11.0	14.5	
California	211.0	240.0	210.0	
New Mexico	6.8	7.0	6.8	
Texas	18.0	17.0	17.5	
United States	250.3	275.0	248.8	
All				
Alabama	510.0	510.0	497.0	
Arizona	174.5	166.0	173.5	
Arkansas	485.0	580.0	480.0	
California	259.0	280.0	257.0	
Florida	117.0	120.0	93.0	
Georgia	1,430.0	1,350.0	1,305.0	
Kansas	165.0	185.0	152.0	
Louisiana	195.0	260.0	189.0	
Mississippi	620.0	700.0	615.0	
Missouri	325.0	370.0	322.0	
New Mexico	83.8	77.0	62.8	
North Carolina	430.0	460.0	415.0	
Oklahoma	780.0	720.0	550.0	
South Carolina	300.0	300.0	275.0	
Tennessee	360.0	370.0	355.0	
Texas	7,768.0	7,167.0	4,367.5	
Virginia	98.0	105.0	97.0	
United States	14,100.3	13,720.0	10,205.8	

¹ Estimates to be released August 2019 in the *Crop Production* report.

Hops Area Harvested by Variety – States and United States: 2018 and Forecasted June 1, 2019

State and variety	Area harvested	Strung for harvest
	2018	2019
	(acres)	(acres)
Idaho		
Amarillo ^R , VGXP01	825	562
Apollo TM	232	(D)
Bravo TM	87	(D)
Calypso TM	81	81
Cascade	836	657
Centennial	(D)	(D)
Chinook	962	779
Citra ^R , HBC 394	855	1,072
Cluster	63	(D)
Comet	(D)	87
Crystal	150	130
El Dorado ^R	120	329
Eureka TM	133	(D)
Galena	109	113
Hallertauer	(D)	69
Idaho 7 TM	(D)	388
Mosaic ^R , HBC 369	506	803
Northern Brewer	(D)	58
Saaz	(D)	297
Simcoe ^R , YCR 14	449	469
Super Galena TM	84	(D)
Willamette	(D)	169
Zeus	1,496	1,480
Experimental	(D)	(D)
Other varieties ¹	1,152	1,027
Total	8,140	8,570
Oregon		
Cascade	1,064	912
Centennial	698	587
Chinook	129	117
Citra ^R , HBC 394	690	1,021
Crystal	354	247
Fuggle	59	65
Golding	121	91
Magnum	105	77
Meridian	(D)	81
Mosaic ^R , HBC 369	(D)	496
Mt. Hood	311	293
Nugget	1,307	1,071
Perle	77	(D)
Simcoe ^R , YCR 14	436	513
Sterling	191	137
Super Galena TM	84	78
Tettnanger	72	(D)
Willamette	913	633
Experimental	(D)	(D)
Other varieties ¹	1,114	1,087
Total	7,725	7,506

See footnote(s) at end of table.

--continued

**Hops Area Harvested by Variety – States and United States: 2018 and Forecasted
June 1, 2019 (continued)**

State and variety	Area harvested	Strung for harvest
	2018 (acres)	2019 (acres)
Washington		
Ahtanum™, YCR 1	255	261
Amarillo ^R , VGXP01	1,895	1,598
Apollo™	795	849
Azacca™, ADHA-483	546	589
Bravo™	280	236
Cascade	4,274	3,711
Cashmere	195	312
Centennial	3,875	3,040
Chinook	1,734	1,472
Citra ^R , HBC 394	4,837	6,942
Cluster	610	464
C/T/Z ^R	2,034	2,350
Comet	218	244
Crystal	114	66
Ekuanot ^R , HBC 366	865	631
El Dorado ^R	418	632
Eureka™	409	424
Galena	390	297
Glacier	(D)	(D)
Idaho 7™	(D)	68
Jarrylo ^R , ADHA-881	(D)	17
Loral ^R , HBC 291	172	125
Mosaic ^R , HBC 369	1,932	2,926
Mt. Hood	104	52
Mt. Rainier	306	259
Nugget	126	104
Pahto™, HBC 682	1,721	2,073
Palisade ^R , YCR 4	515	(D)
Pekko ^R , ADHA-871	92	(D)
Sabro™, HBC 438	-	678
Simcoe ^R , YCR 14	3,103	3,383
Sorachi Ace	146	151
Summit™	1,574	1,072
Super Galena™	500	473
Tahoma	209	235
Tettnanger	(D)	(D)
Willamette	376	310
Zeus	2,592	2,614
Experimental	374	363
Other varieties ¹	1,584	2,242
Total	39,170	41,263
United States²	55,035	57,339

- Represents zero.

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

^R Registered

TM Trademark

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

² Includes 590 organic acres in 2019 and 430 organic acres in 2018.

Sugarbeet Area Planted and Harvested – States and United States: 2018 and 2019

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

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
California ²	24.6	24.5	24.6	24.2
Colorado	26.3	25.3	25.5	25.0
Idaho	163.0	166.0	163.0	166.0
Michigan	150.0	145.0	147.0	144.0
Minnesota	415.0	427.0	408.0	413.0
Montana	43.5	42.1	42.4	41.9
Nebraska	45.5	44.5	44.1	43.7
North Dakota	202.0	209.0	199.0	205.0
Oregon	9.3	10.0	9.3	9.5
Washington	1.8	2.0	1.8	2.0
Wyoming	32.1	31.4	30.7	30.8
United States	1,113.1	1,126.8	1,095.4	1,105.1

¹ Forecasted.

² Relates to year of intended harvest for fall planted beets in central California and to year of planting for overwintered beets in central and southern California.

Sugarcane for Sugar and Seed Area Harvested – States and United States: 2018 and 2019

State	Area harvested	
	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Florida	412.3	407.0
Louisiana	448.5	475.0
Texas	38.9	34.4
United States	899.7	916.4

¹ Forecasted.

Tobacco Area Harvested – States and United States: 2018 and 2019

State	Area harvested	
	2018 (acres)	2019 ¹ (acres)
Georgia	12,500	10,000
Kentucky	68,100	58,000
North Carolina	152,750	122,400
Pennsylvania	7,800	5,700
South Carolina	12,300	10,000
Tennessee	15,700	11,800
Virginia	22,280	17,920
United States	291,430	235,820

¹ Forecasted.

Tobacco Area Harvested by Class and Type – States and United States: 2018 and 2019

Class and type	Area harvested	
	2018 (acres)	2019 ¹ (acres)
Class 1, Flue-cured (11-14)		
Georgia	12,500	10,000
North Carolina	152,000	122,000
South Carolina	12,300	10,000
Virginia	21,000	17,000
United States	197,800	159,000
Class 2, Fire-cured (21-23)		
Kentucky	11,000	8,000
Tennessee	7,600	6,400
Virginia	280	220
United States	18,880	14,620
Class 3A, Light air-cured (31-32)		
Type 31, Burley		
Kentucky	50,000	45,000
North Carolina	750	400
Pennsylvania	4,000	2,500
Tennessee	5,300	3,500
Virginia	1,000	700
United States	61,050	52,100
Type 32, Southern Maryland Belt		
Pennsylvania	1,400	1,000
United States	1,400	1,000
Total light air-cured (31-32)	62,450	53,100
Class 3B, Dark air-cured (35-37)		
Kentucky	7,100	5,000
Tennessee	2,800	1,900
United States	9,900	6,900
Class 4, Cigar filler (41)		
Type 41, Pennsylvania Seedleaf		
Pennsylvania	2,400	2,200
United States	2,400	2,200
All tobacco		
United States	291,430	235,820

¹ Forecasted.

Dry Edible Bean Area Planted and Harvested – States and United States: 2018 and 2019

[Excludes beans grown for garden seed. Beginning in 2019, chickpeas are excluded]

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
California	48.0	25.0	47.7	24.8
Colorado	42.0	40.0	31.5	38.0
Idaho	185.0	65.0	183.0	64.5
Michigan	195.0	210.0	193.0	206.0
Minnesota	175.0	205.0	168.0	196.0
Montana ²	395.0	(NA)	386.0	(NA)
Nebraska	140.0	120.0	131.0	110.0
North Dakota	635.0	600.0	615.0	580.0
Texas ²	18.0	(NA)	16.0	(NA)
Washington	218.0	20.0	217.0	20.0
Wyoming	30.0	22.0	27.8	20.0
United States	2,081.0	1,307.0	2,016.0	1,259.3

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Chickpea Area Planted and Harvested – States and United States: 2018 and 2019

[Beginning in 2019, chickpeas are excluded from dry edible beans]

Size and State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Small chickpeas²				
California	-	-	-	-
Colorado ³	-	(NA)	-	(NA)
Idaho	62.0	30.0	61.7	29.8
Michigan ³	-	(NA)	-	(NA)
Minnesota ³	-	(NA)	-	(NA)
Montana	(D)	50.0	(D)	48.0
Nebraska ³	(D)	(NA)	(D)	(NA)
North Dakota	18.4	10.0	17.8	9.7
Texas ³	-	(NA)	-	(NA)
Washington	70.0	35.0	69.8	34.9
Wyoming ³	-	(NA)	-	(NA)
Other States ⁴	72.3	-	70.3	-
United States	222.7	125.0	219.6	122.4
Large chickpeas⁵				
California	15.1	14.5	15.0	14.3
Colorado ³	(D)	(NA)	(D)	(NA)
Idaho	72.0	60.0	71.5	59.5
Michigan ³	-	(NA)	-	(NA)
Minnesota ³	(D)	(NA)	(D)	(NA)
Montana	(D)	200.0	(D)	195.0
Nebraska ³	(D)	(NA)	(D)	(NA)
North Dakota	96.0	65.0	90.0	62.0
Texas ³	-	(NA)	-	(NA)
Washington	120.0	95.0	119.5	94.5
Wyoming ³	(D)	(NA)	(D)	(NA)
Other States ⁴	333.8	-	327.2	-
United States	636.9	434.5	623.2	425.3
All chickpeas				
California	15.1	14.5	15.0	14.3
Colorado ³	(D)	(NA)	(D)	(NA)
Idaho	134.0	90.0	133.2	89.3
Michigan ³	-	(NA)	-	(NA)
Minnesota ³	(D)	(NA)	(D)	(NA)
Montana	390.0	250.0	382.0	243.0
Nebraska ³	12.5	(NA)	12.0	(NA)
North Dakota	114.4	75.0	107.8	71.7
Texas ³	-	(NA)	-	(NA)
Washington	190.0	130.0	189.3	129.4
Wyoming ³	(D)	(NA)	(D)	(NA)
Other States ⁴	3.6	-	3.5	-
United States	859.6	559.5	842.8	547.7

- Represents zero.

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

(NA) Not available.

¹ Forecasted.

² Chickpeas (or Garbanzo beans) smaller than 20/64 inches.

³ Estimates discontinued in 2019.

⁴ Includes data withheld above.

⁵ Chickpeas (or Garbanzo beans) larger than 20/64 inches.

Lentil Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Idaho	35.0	40.0	34.0	39.0
Montana	500.0	320.0	450.0	300.0
North Dakota	185.0	105.0	175.0	100.0
Washington	60.0	70.0	59.0	69.0
United States	780.0	535.0	718.0	508.0

¹ Forecasted.

Dry Edible Pea Area Planted and Harvested – States and United States: 2018 and 2019

[For 2018, excludes both wrinkled seed peas and Austrian winter peas. For 2019, wrinkled seed peas and Austrian winter peas included]

State	Area planted		Area harvested	
	2018	2019	2018	2019 ¹
	(1,000 acres)	(1,000 acres)	(1,000 acres)	(1,000 acres)
Idaho	8.0	25.0	7.6	24.0
Montana	335.0	490.0	310.0	455.0
Nebraska	58.0	30.0	49.0	28.0
North Dakota	375.0	405.0	365.0	390.0
Oregon ²	6.5	(NA)	6.3	(NA)
South Dakota	22.0	15.0	19.0	14.0
Washington	52.0	62.0	51.0	61.0
United States	856.5	1,027.0	807.9	972.0

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Potato Area Planted and Harvested – States and United States: 2018 and 2019

State	Area planted		Area harvested	
	2018 (1,000 acres)	2019 (1,000 acres)	2018 (1,000 acres)	2019 ¹ (1,000 acres)
Alaska ²	0.5	(NA)	0.5	(NA)
California	38.5	41.0	38.5	40.6
Colorado	55.3	54.0	55.0	53.7
San Luis Valley	51.8	49.5	51.6	49.3
All other areas	3.5	4.5	3.4	4.4
Florida	22.0	25.0	20.8	24.0
Idaho	315.0	315.0	315.0	315.0
Illinois ²	7.7	(NA)	7.6	(NA)
Kansas ²	3.3	(NA)	3.3	(NA)
Maine	50.0	50.0	49.5	49.5
Maryland ²	2.2	(NA)	2.0	(NA)
Michigan	50.0	50.0	48.0	49.0
Minnesota	44.0	41.0	43.5	40.0
Missouri ²	7.8	(NA)	7.4	(NA)
Montana ²	11.1	(NA)	11.1	(NA)
Nebraska	19.5	19.5	19.3	19.3
New Jersey ²	2.0	(NA)	2.0	(NA)
New York ²	14.5	(NA)	14.2	(NA)
North Carolina ²	13.0	(NA)	12.2	(NA)
North Dakota	74.5	72.0	73.0	70.0
Oregon	46.0	45.0	46.0	45.0
Texas	14.5	20.0	14.0	19.5
Virginia ²	4.8	(NA)	4.4	(NA)
Washington	165.0	165.0	165.0	165.0
Wisconsin	72.0	70.0	71.0	69.0
United States	1,033.2	967.5	1,023.3	959.6

(NA) Not available.

¹ Forecasted.

² Estimates discontinued in 2019.

Potato Percent of Acreage Planted by Type of Potato – Selected States and Total: 2018 and 2019

[Predominant type shown may include small portion of other type(s) constituting less than 1 percent of State's total. Blue types are reported under red types]

State	Red		White		Yellow		Russet	
	2018	2019	2018	2019	2018	2019	2018	2019
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
California ¹	8	5	62	70	6	8	24	17
Colorado	6	2	3	3	10	10	81	85
Florida ²	(NA)	60	(NA)	35	(NA)	5	(NA)	-
Idaho	4	4	3	3	2	2	91	91
Maine	3	6	39	31	1	3	57	60
Michigan	1	1	82	82	1	1	16	16
Minnesota	19	23	10	12	2	3	69	62
Montana ³	3	(NA)	7	(NA)	1	(NA)	89	(NA)
Nebraska	1	1	48	47	-	2	51	50
New York ³	3	(NA)	93	(NA)	4	(NA)	-	(NA)
North Dakota	25	23	33	32	2	3	40	42
Oregon	1	1	19	21	1	1	79	77
Texas ²	(NA)	10	(NA)	57	(NA)	4	(NA)	29
Washington	5	4	9	10	2	2	84	84
Wisconsin	9	11	42	36	5	6	44	47
Total	7	8	20	21	2	3	71	68

- Represents zero.

(NA) Not available.

¹ Beginning in 2019, estimates represent all California.

² Estimates began in 2019.

³ Estimates discontinued in 2019.

Biotechnology Varieties

The National Agricultural Statistics Service conducts the June Agricultural Survey in all States each year. Randomly selected farmers across the United States were asked if they planted corn, soybeans, or Upland cotton seed that, through biotechnology, is resistant to herbicides, insects, or both. Conventionally bred herbicide resistant varieties are excluded. Insect resistant varieties include only those containing *bacillus thuringiensis* (Bt). The Bt varieties include those that contain more than one gene that can resist different types of insects. Stacked gene varieties include only those containing biotech traits for both herbicide and insect resistance. The States published individually in the following tables represent 85 percent of all corn planted acres, 88 percent of all soybean planted acres, and 88 percent of all Upland cotton planted acres.

Corn Biotechnology Varieties as a Percent of All Corn Planted – States and United States: 2018 and 2019

State	Insect resistant		Herbicide resistant	
	2018 (percent)	2019 (percent)	2018 (percent)	2019 (percent)
Illinois	1	1	5	4
Indiana	2	2	7	9
Iowa	3	4	7	7
Kansas	2	1	10	12
Michigan	2	3	11	11
Minnesota	1	2	9	8
Missouri	2	2	7	7
Nebraska	3	3	9	8
North Dakota	2	3	21	15
Ohio	2	2	14	11
South Dakota	2	3	15	12
Texas	6	6	12	9
Wisconsin	3	3	13	14
Other States ¹	4	3	15	13
United States	2	3	10	9

State	Stacked gene varieties		All biotech varieties ²	
	2018 (percent)	2019 (percent)	2018 (percent)	2019 (percent)
Illinois	89	88	95	93
Indiana	77	76	86	87
Iowa	83	81	93	92
Kansas	84	82	96	95
Michigan	72	75	85	89
Minnesota	83	80	93	90
Missouri	83	82	92	91
Nebraska	84	85	96	96
North Dakota	69	78	92	96
Ohio	70	76	86	89
South Dakota	79	79	96	94
Texas	75	80	93	95
Wisconsin	72	72	88	89
Other States ¹	71	75	90	91
United States	80	80	92	92

¹ Other States includes all other States in the corn estimating program.

² All biotech varieties for the United States and Other States may not add due to rounding.

Upland Cotton Biotechnology Varieties as a Percent of Upland Cotton Planted – States and United States: 2018 and 2019

State	Insect resistant		Herbicide resistant	
	2018 (percent)	2019 (percent)	2018 (percent)	2019 (percent)
Alabama	1	2	6	5
Arkansas	9	7	14	10
California	6	10	18	38
Georgia	1	1	3	1
Louisiana	3	3	4	4
Mississippi	2	1	6	4
Missouri	6	2	20	17
North Carolina	1	2	3	6
Tennessee	1	1	4	3
Texas	3	3	10	7
Other States ¹	2	2	10	6
United States	3	3	9	6
State	Stacked gene varieties		All biotech varieties ²	
	2018 (percent)	2019 (percent)	2018 (percent)	2019 (percent)
Alabama	92	92	99	99
Arkansas	76	82	99	99
California	57	41	81	89
Georgia	96	97	100	99
Louisiana	92	92	99	99
Mississippi	91	94	99	99
Missouri	73	78	99	97
North Carolina	89	89	93	97
Tennessee	91	95	96	99
Texas	77	88	90	98
Other States ¹	86	90	98	98
United States	82	89	94	98

¹ Other States includes all other States in the Upland cotton estimating program.

² All biotech varieties for the United States and Other States may not add due to rounding.

Soybean Biotechnology Varieties as a Percent of All Soybeans Planted – States and United States: 2018 and 2019

State	Herbicide resistant		All biotech varieties	
	2018 (percent)	2019 (percent)	2018 (percent)	2019 (percent)
Arkansas	97	96	97	96
Illinois	93	94	93	94
Indiana	91	93	91	93
Iowa	95	94	95	94
Kansas	95	95	95	95
Michigan	93	92	93	92
Minnesota	95	95	95	95
Mississippi	99	99	99	99
Missouri	91	94	91	94
Nebraska	96	95	96	95
North Dakota	95	95	95	95
Ohio	91	95	91	95
South Dakota	97	93	97	93
Wisconsin	92	91	92	91
Other States ¹	94	94	94	94
United States	94	94	94	94

¹ Other States includes all other States in the soybean estimating program.

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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	2,857	1,978	2,331
Corn for grain ¹	89,129	91,700	81,740	83,595
Corn for silage	(NA)		6,113	
Hay, all	(NA)	(NA)	52,839	52,773
Alfalfa	(NA)	(NA)	16,608	16,828
All other	(NA)	(NA)	36,231	35,945
Oats	2,746	2,549	865	909
Proso millet	443	433	403	
Rice	2,946	2,756	2,915	2,711
Rye	2,011	1,875	273	298
Sorghum for grain ¹	5,690	5,125	5,061	4,585
Sorghum for silage	(NA)		264	
Wheat, all	47,800	45,609	39,605	38,405
Winter	32,535	31,778	24,742	24,924
Durum	2,065	1,401	1,967	1,356
Other spring	13,200	12,430	12,896	12,125
Oilseeds				
Canola	1,990.7	2,018.0	1,943.5	1,986.0
Cottonseed	(X)		(X)	
Flaxseed	208	355	198	340
Mustard seed	102.5	110.0	97.5	104.5
Peanuts	1,425.5	1,364.0	1,368.5	1,323.0
Rapeseed	5.7	14.8	5.4	14.0
Safflower	167.5	153.0	156.4	145.5
Soybeans for beans	89,196	80,040	88,110	79,266
Sunflower	1,301.0	1,380.0	1,222.5	1,322.0
Cotton, tobacco, and sugar crops				
Cotton, all	14,100.3	13,720.0	10,205.8	
Upland	13,850.0	13,445.0	9,957.0	
American Pima	250.3	275.0	248.8	
Sugarbeets	1,113.1	1,126.8	1,095.4	1,105.1
Sugarcane	(NA)	(NA)	899.7	916.4
Tobacco	(NA)	(NA)	291.4	235.8
Dry beans, peas, and lentils				
Austrian winter peas ²	16.4	(NA)	10.9	(NA)
Chickpeas ³	859.6	559.5	842.8	547.7
Dry edible beans ³	2,081.0	1,307.0	2,016.0	1,259.3
Dry edible peas ²	856.5	1,027.0	807.9	972.0
Lentils	780.0	535.0	718.0	508.0
Wrinkled seed peas ²	(NA)	(NA)	(NA)	(NA)
Potatoes and miscellaneous				
Hops	(NA)	(NA)	55.0	57.3
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		58.5	
Potatoes	1,033.2	967.5	1,023.3	959.6
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 (1,000)	2019 (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	1,183,939	
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	124	(NA)
Chickpeas, all ^{3 5}	cwt	1,512	12,742	(NA)
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)	389	(NA)
Potatoes and miscellaneous				
Hops	pounds	1,943	106,906.7	
Maple syrup	gallons	(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	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	1,156,200	800,480	943,330
Corn for grain ¹	36,069,620	37,110,070	33,079,360	33,830,060
Corn for silage	(NA)		2,473,870	
Hay, all ²	(NA)	(NA)	21,383,410	21,356,710
Alfalfa	(NA)	(NA)	6,721,090	6,810,120
All other	(NA)	(NA)	14,662,320	14,546,580
Oats	1,111,280	1,031,550	350,060	367,860
Proso millet	179,280	175,230	163,090	
Rice	1,192,220	1,115,330	1,179,670	1,097,110
Rye	813,830	758,790	110,480	120,600
Sorghum for grain ¹	2,302,690	2,074,040	2,048,140	1,855,500
Sorghum for silage	(NA)		106,840	
Wheat, all ²	19,344,180	18,457,510	16,027,750	15,542,120
Winter	13,166,590	12,860,240	10,012,840	10,086,490
Durum	835,680	566,970	796,030	548,760
Other spring	5,341,910	5,030,300	5,218,880	4,906,870
Oilseeds				
Canola	805,620	816,660	786,520	803,710
Cottonseed	(X)		(X)	
Flaxseed	84,180	143,660	80,130	137,590
Mustard seed	41,480	44,520	39,460	42,290
Peanuts	576,890	552,000	553,820	535,400
Rapeseed	2,310	5,990	2,190	5,670
Safflower	67,790	61,920	63,290	58,880
Soybeans for beans	36,096,730	32,391,390	35,657,240	32,078,160
Sunflower	526,500	558,470	494,730	535,000
Cotton, tobacco, and sugar crops				
Cotton, all ²	5,706,250	5,552,350	4,130,190	
Upland	5,604,960	5,441,060	4,029,500	
American Pima	101,290	111,290	100,690	
Sugarbeets	450,460	456,000	443,300	447,220
Sugarcane	(NA)	(NA)	364,100	370,860
Tobacco	(NA)	(NA)	117,940	95,430
Dry beans, peas, and lentils				
Austrian winter peas ³	6,640	(NA)	4,410	(NA)
Chickpeas ⁴	347,870	226,420	341,070	221,650
Dry edible beans ⁴	842,160	528,930	815,860	509,630
Dry edible peas ³	346,620	415,620	326,950	393,360
Lentils	315,660	216,510	290,570	205,580
Wrinkled seed peas ³	(NA)	(NA)	(NA)	(NA)
Potatoes and miscellaneous				
Hops	(NA)	(NA)	22,270	23,200
Maple syrup	(NA)	(NA)	(NA)	(NA)
Mushrooms	(NA)		(NA)	
Peppermint oil	(NA)		23,670	
Potatoes	418,130	391,540	414,120	388,340
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		32,221,540	
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.

Spring Weather Summary

Highlights: The continuation of El Niño through the Northern Hemisphere spring contributed to an excessively wet pattern across much of the United States. Drought coverage dipped to a Drought Monitor-era record low of 2.28 percent on April 23. Subsequently, drought coverage in the continental United States increased to 5.28 percent by June 4, courtesy of increasingly dry conditions in parts of the Southeast and Pacific Northwest. By the end of spring, developing drought also extended south of the Canadian border into parts of Montana and North Dakota.

However, the more significant agricultural and hydrological story during the spring of 2019 was the incessant wetness across large sections of the mid-South, Midwest, Plains, and West. Flooding began early in the spring, when a mid-March storm delivered heavy precipitation across the western Corn Belt atop frozen soils and an extensive snow cover. In parts of the middle Missouri Valley and environs, record-high water levels engulfed communities and agricultural land—and led to the March 14 destruction of the Spencer Dam along the Niobrara River in northern Nebraska.

Flooding returned to parts of the Plains and Midwest starting in late April, as frequent storms dumped copious rainfall. Major flooding persisted for 2 months (62 days from March 16 – May 16) along the Mississippi River at Burlington, IA, breaking the 1993 record of 41 consecutive days. In late May and early June, record flooding affected the Arkansas River in Oklahoma and Arkansas, while the Mississippi River between Quincy, Illinois, and Chester, Missouri, climbed to its second-highest level on record, behind 1993.

In addition to the high river levels, which caused extensive closings and delays for barges and other waterway traffic, extensive wetness resulted in a record-slow planting pace for the Nation's corn, soybeans, and rice. By June 2, only 67 percent of the intended corn acreage and 39 percent of the soybeans had been planted, compared to the 1995 records of 77 and 40 percent, respectively.

Across the Plains and upper Midwest, cool spring weather (as much as 2 to 4°F below normal) accompanied the relentless precipitation. In fact, some northern crop production areas experienced frequent snow through the end of April. In contrast, spring temperatures averaged more than 2°F above normal in the southern Atlantic States.

Historical Perspective: The National Centers for Environmental Information reported that the meteorological spring of 2019 was very wet with variable temperatures. For the Lower 48 States, it was the sixth-wettest spring during the 125-year period of record, behind 1957, 1973, 1983, 1991, and 1995. With an average of 9.85 inches (124 percent of normal), it was the Nation's wettest spring since 1995, when 9.92 inches fell. Meanwhile, the Nation's spring average temperature of 50.9°F was less than 0.1°F below the 20th century mean. It was the coolest spring since 2013, and the 62nd-coolest spring going back to 1895.

State temperature rankings ranged from the ninth-coolest spring in South Dakota to the seventh-warmest spring in Delaware and South Carolina. Top-ten rankings for spring warmth were also observed in Florida, Georgia, Maryland, South Carolina, and Virginia. Meanwhile, state precipitation rankings ranged from the 13th-driest spring in Washington to the wettest spring on record in Kansas. In addition to Kansas, top-ten rankings for spring wetness were noted in two Western States (Nevada and Utah); three Plains States (Nebraska, Oklahoma, and South Dakota); and five Midwestern States (Illinois, Indiana, Iowa, Missouri, and Wisconsin).

March: Historic flooding engulfed parts of the middle Missouri Valley, following a mid-March storm that maximized runoff due to rapidly melting snow and heavy rain falling on still-frozen soils. The storm also blasted areas from eastern Colorado into parts of the Dakotas with blizzard conditions, greatly stressing livestock. Mostly tranquil weather trailed the powerhouse storm, allowing recovery efforts to begin.

Prior to the storm's arrival, winter-like cold gripped most of the country. In fact, record-setting low temperatures blanketed the northern Plains and upper Midwest, while frigid conditions also persisted in the Northwest. Periods of warmth developed in most areas as the month progressed, but March temperatures averaged at least 10°F below normal across portions of the northern Plains. Above-normal monthly temperatures were mostly limited to the lower Southeast and parts of the Southwest. However, the Southeast also experienced a sharp cold spell in early March, following a warm February.

Much of the Deep South noted drier-than-normal weather, favoring spring planting efforts. March precipitation was also lacking from the Pacific Northwest to the northernmost Rockies, leading to water-supply concerns in the northern Cascades and neighboring areas. However, large sections of the West—especially from the Sierra Nevada to the central Rockies—continued to benefit from widespread precipitation and favorable runoff prospects. By late March, the California Department of Water Resources reported that the average water equivalency of the Sierra Nevada snowpack stood at 45 inches, approximately 160 percent of the normal peak value.

Farther east, drier-than-normal March weather covered large sections of the eastern United States, allowing previously wet fields to begin drying out in preparation for spring planting. Elsewhere, many rivers across the northern Plains and upper Midwest experienced significant rises in late March, as an extensive snow cover began to melt. However, mostly dry weather prevailed across the northern United States late in the month, leading to an orderly start to the melt season.

April: Most of the country remained wet in April, with drought coverage across the Lower 48 States reaching a modern-era record low of 2.28 percent late in the month, according to the Drought Monitor. As a result, soggy soils disrupted planting activities in a multitude of regions, including the northern and southern Plains, the Mississippi Delta, and much of the Midwest and Northwest. In addition, runoff from rain and melting snow led to widespread lowland flooding, especially in the eastern Dakotas and the Mississippi Valley.

By April 28, only 15 percent of the intended corn acreage had been planted—the slowest early-season planting pace since 2013, when 5 percent had been sown on that date. Meanwhile, spring wheat planting progress was extremely slow for the second year in a row, with just 13 percent of the crop planted by April 28. Other recent years with sluggish April spring wheat planting progress included 2011 (8 percent planted by the 28th), 2018 (9 percent), and 2013 (12 percent).

Only a few regions, such as the central Plains and the lower Southeast, received near- or below-normal April precipitation. In those areas, planting progressed at a slightly faster pace. In California and the Desert Southwest, seasonably dry weather favored an acceleration of fieldwork, following some early-season planting delays.

One of the month's most impressive storms struck the upper Midwest from April 10-12, resulting in blizzard conditions due to wind-driven snow that locally accumulated to a depth of 1 to 2 feet or more. Additional Midwestern snow fell as late as April 27, helping to lower soil temperatures and further delay the onset of widespread spring fieldwork.

Cooler-than-normal conditions lingered for much of the month across the Nation's northern tier, while above-normal April temperatures dominated California, the Great Basin, the Four Corners States, and much of the eastern United States.

May: 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 Nation's corn and 39 percent of the soybeans had been planted, breaking 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 mid-Mississippi Valley surged to their second-highest levels on record, behind 1993.

The incessantly wet conditions were accompanied by significantly below-normal temperatures, resulting in 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. 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, fostering some drought expansion.

Meanwhile, hot, dry weather developed in the Southeast, particularly in the southern Atlantic States, substantially reducing 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 locations 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.

Crop Comments

Corn: The 2019 corn planted area for all purposes is estimated at 91.7 million acres, up 3 percent from last year. Growers expect to harvest 83.6 million acres for grain, up 2 percent from last year.

Farmers responding to the survey indicated that 83 percent of the intended corn acreage had been planted at the time of the interview, significantly lower than the 10-year average. Record low planted area is estimated in Rhode Island, while record high planted area is estimated in Nevada and Oregon.

By April 14, producers had planted 3 percent of the Nation's corn acreage, equal to last year but 2 percentage points behind the 5-year average. By April 21, producers had planted 6 percent of the Nation's corn acreage, 1 percentage point ahead of last year but 6 percentage points behind the 5-year average. All States were at or behind their respective 5-year averages at that time, while planting had not yet begun in Michigan, Minnesota, North Dakota, Pennsylvania, and South Dakota.

By May 5, producers had planted 23 percent of the Nation's corn acreage, 13 percentage points behind last 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 last year and 7 percentage points behind the 5-year average. By May 12, producers had planted 30 percent of the Nation's corn acreage, 29 percentage points behind last year and 36 percentage points behind the 5-year average. By May 19, producers had planted 49 percent of the Nation's corn acreage, 29 percentage points behind last year and 31 percentage points behind the 5-year average. Seventy percent of Iowa's intended corn acreage was planted by May 19, thirteen percentage points behind last year and 19 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 last year and 30 percentage points behind the 5-year average. Twenty percent of Iowa's corn acreage had emerged by May 19, twenty-nine percentage points behind last year and 33 percentage points behind the 5-year average. By May 26, producers had planted 58 percent of the Nation's corn acreage, 32 percentage points behind both last year and the 5-year average. Thirty-two percent of the Nation's corn acreage had emerged by May 26, thirty-seven percentage points behind both last year and the 5-year average. Emergence in 13 of the 18 estimating States was behind the 5-year average by 20 percentage points or more.

By June 2, producers had planted 67 percent of the Nation's corn acreage, 29 percentage points behind both last year and the 5-year average. Forty-six percent of the corn acreage had emerged by June 2, thirty-eight percentage points behind both last year and the 5-year average. Emergence in 13 of the 18 estimating States was behind the 5-year average by 20 percentage points or more. By June 9, producers had planted 83 percent of the Nation's corn acreage, 16 percentage points behind both last year and the 5-year average. Sixty-two percent of the corn acreage had emerged by June 9, thirty-one percentage points behind both last year and the 5-year average. By June 16, producers had planted 92 percent of the Nation's corn acreage, 8 percentage points behind both last year and the 5-year average. Seventy-nine percent of the corn acreage had emerged by June 16, eighteen percentage points behind both last year and the 5-year average. By June 23, producers had planted 96 percent of the Nation's corn acreage, 4 percentage points behind both last year and the 5-year average. Eighty-nine percent of the corn acreage had emerged by June 23, eleven percentage points behind last year and 10 percentage points behind the 5-year average. Emergence was behind the 5-year average by 20 percentage points or more in Michigan, Ohio, and South Dakota at that time. On June 23, fifty-six percent of the corn acreage was rated in good to excellent condition, 21 percentage points below the same time last year.

Ninety-two percent of this year's corn acreage was planted with biotechnology seed varieties, unchanged from last year. Biotechnology seed includes traits for insect resistance (Bt), herbicide resistance, or stacked gene which contains traits for both herbicide and insect resistance.

Sorghum: Growers planted 5.13 million acres of sorghum for all purposes in 2019, down 10 percent from last year. Kansas and Texas, the leading sorghum-producing States, account for 79 percent of the United States acreage. Growers expect to harvest 4.59 million acres for grain, down 9 percent from last year.

As of June 23, eighty-four percent of the sorghum acreage had been planted, 10 percentage points behind last year and 7 percentage points behind the 5-year average. Seventeen percent of the acreage was headed, 3 percentage points behind both last year and the 5-year average. Seventy-two percent of the acreage was rated in good to excellent condition on June 23, compared with 56 percent at the same time last year

Beginning in 2019, sorghum estimates were discontinued in Arkansas, Georgia, Illinois, Louisiana, Mississippi, Missouri, New Mexico, and North Carolina.

Oats: Area seeded to oats for the 2019 crop year is estimated at 2.55 million acres, down slightly from 2018 for comparable States. Planted acreage is down or unchanged in 13 of the 23 major producing States compared with last year. Decreases of 20,000 acres or more are estimated in California, Michigan, Nebraska, North Dakota, South Dakota, and Texas. Area for harvest, forecast at 909,000 acres, is up 10 percent from 2018 for comparable States.

Nationally, oat producers had seeded 27 percent of this year's acreage by April 7, equal to the same time last year but 5 percentage points behind the 5-year average. Producers had seeded 50 percent of this year's acreage by May 5, four percentage points behind last year and 22 percentage points behind the 5-year average. Eighty-five percent of the oat acreage was emerged by May 26, eight percentage points behind last year and 11 percentage points behind the 5-year average. As of June 23, sixty-four percent of the oat acreage was reported in good to excellent condition, compared with 72 percent rated in these two categories at the same time last year.

Beginning in 2019, oat estimates were discontinued in Alabama, Colorado, South Carolina, Washington, and Wyoming.

Barley: Producers seeded 2.86 million acres of barley for the 2019 crop year, up 12 percent from the previous year. Harvested area, forecast at 2.33 million acres, is up 18 percent from 2018.

Nationwide, 94 percent of the barley acreage was sown by June 2, two percentage points behind last year and 3 percentage points behind the 5-year average. Ninety-two percent of the barley acreage had emerged by June 16, three percentage points behind last year and 4 percentage points behind the 5-year average. Heading of the Nation's barley acreage advanced to 9 percent complete by June 23, sixteen percentage points behind the previous year and 21 percentage points behind the 5-year average. Overall, 72 percent of the barley acreage was reported in good to excellent condition on June 23, eleven percentage points behind the same time last year.

Winter wheat: The 2019 winter wheat planted area is estimated at 31.8 million acres, down 2 percent from last year but up 1 percent from the previous estimate. This represents the second lowest planted acreage on record for the United States. Of the total acreage, about 22.7 million acres are Hard Red Winter, 5.54 million acres are Soft Red Winter, and 3.55 million acres are White Winter. Record low planted area is estimated in Nebraska, New Jersey, and Ohio.

Area harvested for grain is forecast at 24.9 million acres, down 1 percent from the previous forecast but up 1 percent from last year. This represents the second lowest harvested acreage on record for the United States. Harvested acres are down from last year across the central Great Plains, the primary wheat-producing area, and much of the soft red wheat producing area due to the reduction in planted acreage. Record low harvested area is expected in New Jersey, Ohio, and Virginia.

In the Southern Great Plains (Kansas, Oklahoma, and Texas) harvested area is forecast at 11.6 million acres, the same as last year.

As of June 23, harvest was 15 percent complete, 19 percentage points behind the 5-year average pace. Harvest in Kansas, the leading winter wheat-producing State, was 5 percent complete at that time, 31 percentage points behind the 5-year average pace.

Beginning in 2019, winter wheat estimates were discontinued in Arizona, Florida, Iowa, Louisiana, Minnesota, Nevada, and West Virginia.

Durum wheat: Area seeded to Durum wheat for 2019 is estimated at 1.40 million acres, down 32 percent from 2018. Decreases in planted acres from the previous year are estimated in all estimating States, except California. Record low planted acreage is estimated in Idaho and North Dakota. Area harvested for grain is expected to total 1.36 million acres, 31 percent below 2018.

Beginning in 2019, Durum wheat estimates were discontinued in South Dakota.

Other spring wheat: Area seeded to other spring wheat is estimated at 12.4 million acres, down 6 percent from 2018. Of this total, about 12.0 million acres are Hard Red Spring wheat. Compared with last year, acreage decreases are expected in all spring wheat-estimating States, except Idaho and Washington. Planted area in North Dakota, the largest spring wheat-producing State, is estimated at 6.50 million acres, down 1 percent from last year. Planted area in South Dakota is a record low for the State. As of June 23, seven percent of the spring wheat acreage was headed, 23 percentage points behind last year and 22 percentage points behind the 5-year average.

Harvested area is expected to total 12.1 million acres, 6 percent below 2018. As of June 23, seventy-five percent of the acreage was rated in good to excellent condition, 2 percentage points lower than at the same time last year.

Beginning in 2019, spring wheat estimates were discontinued in Colorado, Nevada, Oregon, and Utah.

Rye: The 2019 planted area for rye is estimated at 1.88 million acres, up 4 percent from 2018 for comparable States. Harvested area is expected to total 298,000 acres, up 22 percent from last year for comparable States. In Oklahoma, 55 percent of the rye crop was harvested by June 23, thirty-seven percentage points behind the previous year.

Beginning in 2019, rye estimates were discontinued in Maine, Maryland, New Jersey, South Carolina, and Virginia.

Rice: Area planted to rice in 2019 is estimated at 2.76 million acres, down 6 percent from 2018. Area for harvest is forecast at 2.71 million acres, down 7 percent from last year. Long grain rice planted area decreased 6 percent from last year, with decreases estimated in all States, except Mississippi and Texas. Arkansas, the largest long grain rice-producing State, estimates a 9 percent decrease in planted acreage compared with last year. Medium grain acres decreased by 7 percent from 2018. California, the largest medium grain-producing State, decreased medium grain acres by 2 percent in 2019. Short grain area, estimated at 41,000 acres, is equal to what was planted in 2018. As of June 23, sixty-six percent of the rice acreage was rated in good to excellent condition, compared with 70 percent rated in these two categories at the same time last year.

Proso millet: Area planted to proso millet in 2019 is estimated at 433,000 acres, down 10,000 acres from 2018. Nebraska and South Dakota planted acreage is down from last year, while acreage in Colorado is up.

Hay: Producers intend to harvest 52.8 million acres of all hay in 2019, down less than 1 percent from 2018. If realized, this will represent the lowest total hay harvested area since 1908. The decrease in acreage is due to a 1 percent decrease in all other hay (excluding alfalfa) acreage compared to 2018. Acres of alfalfa and alfalfa mixtures are expected to be up 1 percent compared with 2018.

Record low all hay harvested area is expected in California, Illinois, Maine, Michigan, New York, Ohio, Pennsylvania, Vermont, Washington, and West Virginia in 2019.

Soybeans: The 2019 soybean planted area is estimated at 80.0 million acres, down 10 percent from last year. Compared with last year, planted acreage is down in all 29 major producing States. Area for harvest, forecast at 79.3 million acres, is also down 10 percent from 2018.

Nationwide, 1 percent of the soybean acreage was planted by April 21, one percentage point behind both last year and the 5-year average. Planting was most active in the Delta at that time, with Mississippi at 16 percent, Louisiana at 16 percent,

and Arkansas at 6 percent planted, respectively. On May 5, six percent of the soybeans were planted, 8 percentage points behind both last year and the 5-year average. By May 19, five percent of the Nation's soybean acreage had emerged, 19 percentage points behind last year and 12 percentage points behind the 5-year average. Nationally, 11 percent of the soybean acreage was emerged by May 26, thirty-three percentage points behind last year and 24 percentage points behind the 5-year average. By June 16, seventy-seven percent of the soybean acreage was planted with 55 percent emerged, 34 percentage points behind last year and 29 percentage points behind the 5-year average.

Producers planted 94 percent of the 2019 soybean acreage to herbicide resistant seed varieties, unchanged from 2018.

Beginning in 2019, soybean estimates were discontinued in Florida and West Virginia.

Peanuts: Planted area is estimated at 1.36 million acres in 2019, down 4 percent from 2018 and the lowest planted area since 2014. Area for harvest is forecast at 1.32 million acres, down 3 percent from last year. In Georgia, the largest peanut-producing State, planted area is down 10 percent from 2018. As of June 23, sixty-seven percent of the acreage was rated in good to excellent condition, compared with 65 percent rated in these two categories at the same time last year.

Sunflower: Area planted to sunflower in 2019 totals 1.38 million acres, up 6 percent from 2018. Despite the increase from last year, this is the second lowest planted area for the Nation since 1976. Compared with last year, growers in four of the eight major sunflower-producing States increased sunflower acreage this year. The State with the largest increase from last year is North Dakota, where planted area increased 64,000 acres compared with last year. Planted area is the lowest on record in Nebraska. Harvested area for sunflower is forecast at 1.32 million acres, an increase of 8 percent from last year.

Planted area of oil type varieties, at 1.23 million acres, is up 5 percent from 2018, but is the fourth lowest on record since 1976. In Nebraska, planted area of oil type varieties is the second lowest on record.

Area planted to non-oil varieties, estimated at 155,000 acres, is up 13 percent from last year but is the second lowest on record. Planted area for non-oil varieties in Texas will be the lowest since 1987. Planted area for non-oil varieties in Minnesota is the second lowest on record.

Planting began in early to mid-May and progressed behind both last year's pace and the 5-year average in all four States throughout the month of May. As of June 2, nineteen percent of the acreage had been planted, 27 percentage points behind last year's pace and 25 percentage points behind the 5-year average. At that time, planting progress was behind normal in the four major sunflower-producing States of Colorado, Kansas, North Dakota, and South Dakota. As of June 2, planting in South Dakota had not started due to excessive moisture and flooding this spring, compared with the 5-year average of 33 percent complete by that date. All four States made good progress in June, with planting progress reaching 85 percent complete by June 23, five percentage points behind last year and 4 percentage points behind the 5-year average. As of June 23, seventy-eight percent of the acreage in North Dakota was rated in good to excellent condition.

Canola: Planted area of canola is estimated at 2.02 million acres in 2019, up 1 percent from last year's planted area and represents the second highest planted area on record for the Nation. Compared with last year, planted area increased or remained unchanged in four of the six major canola-producing States, with acreage declines only estimated in Kansas and Oklahoma. Acreage in Oklahoma, at 35,000 acres, is the lowest since 2009, the first year estimates were published for the State. Planted area in North Dakota, the leading canola-producing State, is up 7 percent from last year. Planted area in North Dakota and Washington are record highs and the area forecast for harvest in both States will be record highs, if realized.

Beginning in 2019, canola estimates were discontinued in Idaho and Oregon.

Flaxseed: Area planted to flaxseed in 2019 is estimated at 355,000 acres, up 147,000 acres, or 71 percent from 2018. The harvested area is forecast at 340,000 acres, up 142,000 acres, or 72 percent from last year. Planted acreage in North Dakota, the largest flaxseed-producing State, is up 76 percent from 2018. Flaxseed planting was slow to begin due to cold, wet soil conditions in May. Conditions improved during June, allowing planting progress to advance to 95 percent complete by June 9.

Beginning in 2019, flaxseed estimates were discontinued in South Dakota.

Safflower: Area planted to safflower is estimated at 153,000 acres in 2019, down 3 percent for comparable States in 2018. This is the second lowest planted area for the Nation since records began in 1991. Area for harvest is forecast at 145,500 acres, down 1 percent for comparable States from last year. This represents the third lowest harvested area on record, if realized. Growers in California, the largest State in terms of planted area in 2018, planted the same amount as last year. Compared with last year, the largest decline in planted area occurred in Montana.

Beginning in 2019, safflower estimates were discontinued in North Dakota.

Other oilseeds: Planted area of mustard seed is estimated at 110,000 acres, up 7 percent from 2018 and represents the second highest planted area on record for the Nation. Mustard seed area for harvest is forecast at 104,500 acres, up 7 percent from the previous year and represents the third highest on record, if realized.

Beginning in 2019, estimates for mustard seed were discontinued in Oregon and Washington.

Acreage planted to rapeseed is estimated at 14,800 acres, up 9,100 acres from 2018 and represents the second highest area since records began in 1991. Harvested rapeseed area is forecast at 14,000 acres, and will be the second highest on record, if realized.

Beginning in 2019, estimates for rapeseed were discontinued in Montana, North Dakota, Oregon, and Washington. Estimates began for rapeseed in 2019 for Delaware, Kentucky, Pennsylvania, South Carolina, Tennessee, and Virginia.

Cotton: Growers planted 13.7 million acres in 2019, down 3 percent from last year. Upland area is estimated at 13.4 million acres, down 3 percent from 2018. American Pima area is estimated at 275,000 acres, up 10 percent from 2018.

Compared with last year, 10 States increased planted area, with the largest increase in Arkansas. Upland cotton planted area in Kansas represents a record high for the State. Compared with the previous year, five States planted fewer Upland cotton acres in 2019, including California. Upland cotton planted area is a record low in California.

In California, planting started a little behind schedule due to rain and cooler spring temperatures. Weather conditions in May slowed crop progress and led to concerns of high insect pressure. Some farmers reported switching from Upland to Pima. In Georgia, rainfall received in early June proved to be beneficial but farmers were hoping for more frequent rains to hold off worsening drought conditions. In Texas, wet conditions and hail caused concerns in areas of the Northern and Southern High Plains.

By June 23, ninety-six percent of the Nation's acreage had been planted, 3 percentage points behind the same time last year. By June 23, thirty percent of the acreage was squaring, one percentage point behind last year but 2 percentage points ahead of the 5-year average. As of June 23, fifty percent of the acreage was rated in good to excellent condition, compared with forty-two percent rated in these two categories at the same time last year.

Producers planted 98 percent of their acreage with seed varieties developed using biotechnology, up 4 percentage points from last year. Varieties containing insect resistance (Bt) were planted on 3 percent of the acreage, the same as last year. Herbicide resistant varieties were planted on 6 percent of the acreage, down 3 percentage points from 2018. Stacked gene varieties, those contacting both insect and herbicide resistance, were planted on 89 percent of the acreage, up 7 percentage points from a year ago.

Hops: Hop acreage strung for harvest in 2019 for Washington, Oregon, and Idaho is forecast at a record high 57,339 acres, 4 percent more than last year's previous record of 55,035 acres. Washington, with 41,263 acres for harvest, accounts for 72 percent of the total United States acreage. Idaho area strung for harvest was 8,570 acres, or 15 percent of the United States total. Oregon hop growers accounted for the remaining 13 percent, or 7,506 acres. Acreage increased from last year in Idaho and Washington.

The top five hop varieties strung for harvest in the United States this year are Citra^R, Cascade, Simcoe^R, Mosaic^R and Zeus.

Sugarbeets: Area planted to sugarbeets for the 2019 crop year is estimated at 1.13 million acres, up 1 percent from 2018. Harvested area is forecast at 1.11 million acres, up 1 percent from last year.

The crop was well established with no major problems in Idaho, Oregon, and Washington. Minnesota growers experienced a difficult spring with drowned out areas that likely will not get planted.

Sugarcane: Harvested area of sugarcane for sugar and seed in the United States is forecast at 916,400 acres for the 2019 crop year, up 2 percent from last year.

Early fieldwork in Louisiana was delayed by a wet spring, but recent dry weather allowed growers to catch up. Texas acreage decreased from the previous year due to plow outs exceeding plantings last fall.

Tobacco: United States all tobacco area for harvest in 2019 is expected to total 235,820 acres, down 19 percent from 2018. If realized, this will be the lowest tobacco acres harvested on record. Flue-cured tobacco, at 159,000 acres, is 20 percent below 2018 and accounts for 67 percent of this year's total expected tobacco acreage. Total light air-cured tobacco type area, at 53,100 acres, is down 15 percent from 2018. The burley portion of light-air cured tobacco, at 52,100 acres, is down 15 percent from last year.

Fire-cured tobacco, at 14,620 acres, is down 23 percent from 2018. Dark air-cured tobacco, at 6,900 acres, is down 30 percent from last year. Cigar filler tobacco, at 2,200 acres, is down 8 percent from the previous year.

Dry beans: Area planted for dry beans in 2019 is estimated at 1.31 million acres, up 9 percent from 2018 for comparable States. Area harvested is forecast to total 1.26 million acres, also up 9 percent from 2018 for comparable States. Four of the nine estimating States show an increase in total dry bean planted acres from last year.

Beginning in 2019, dry bean estimates were discontinued in Montana and Texas. Also beginning in 2019, estimates no longer include chickpeas.

Chickpeas: Area planted for all chickpeas for the 2019 crop year is estimated at 559,500 acres, down 35 percent from the previous year. Area harvested is forecast at 547,700 acres, 35 percent below 2018 and, if realized, the lowest total since 2016. Small chickpea area planted is estimated at 125,000 acres, down 44 percent from 2018. Area harvested for small chickpeas is forecast at 122,400 acres, a 44 percent decline from 2018. Area planted for large chickpeas in 2019 is estimated at 434,500 acres, a 32 percent decline from the previous year. Large chickpea area harvested is forecast at 425,300 acres, a 32 percent decline from 2018.

Montana experienced relatively cool and wet weather during April with mixed, but drier, conditions during May. Early spring planting and crop emergence were delayed in areas due to wet soil and cool temperatures. By the end of May, several northern county reporters noted hot temperatures and high winds quickly dried soil out and rain was needed. In California, planting for chickpeas was completed in June.

Beginning in 2019, chickpea estimates were discontinued in Colorado, Michigan, Minnesota, Nebraska, Texas, and Wyoming.

Lentils: Area planted for the 2019 crop year is estimated at 535,000 acres, down 31 percent from 2018. Area forecasted to be harvested, at 508,000 acres, is down 29 percent from the 2018 season.

Idaho's planted acres are the highest since 2010. As of the week ending June 23, ninety-three percent of the lentils in Montana had emerged, behind the five-year average of 97 percent.

Dry edible peas: Area planted for the 2019 crop year is expected to total 1.03 million acres, up 20 percent from the previous season. Area harvested is forecast to total 972,000 acres, also up 20 percent from 2018. Planted area in all States is up, except for Nebraska and South Dakota. In Montana, as of June 23, blooming reached 24 percent, ahead of last year's 21 percent but well behind the 5-year average of 53 percent. As of June 23, blooming reached 15 percent in North Dakota, well behind both last year and the 5-year average.

Beginning in 2019, dry edible pea estimates were discontinued in Oregon. Also beginning in 2019, Austrian winter peas and wrinkled seed peas are included in the dry edible pea estimates.

Potatoes: Area planted to potatoes in 2019 is estimated at 967,500 acres of potatoes, up slightly from 2018 for comparable States. Harvested area is forecast at 959,600 acres, slightly above comparable States from the previous year.

Idaho's winter lasted longer than the previous year and slowed the development of potatoes in areas of the State. As of June 16, seventy-five percent of the potato crop had emerged, behind the 5-year average of 92 percent. Winter and spring precipitation in Washington was good. North Dakota's planting began in late April, ahead of the 2018 pace but behind the 5-year average. It advanced ahead of the 5-year average half-way through the planting season.

Beginning in 2019, potato estimates were discontinued in Alaska, Illinois, Kansas, Maryland, Missouri, Montana, New Jersey, New York, North Carolina, and Virginia.

Statistical Methodology

Survey procedures: The estimates of planted and harvested acreages in this report are based primarily on surveys conducted during the first 2 weeks of June. These surveys are based on a probability area frame survey with a sample of approximately 9,000 segments or parcels of land (average approximately 1 square mile) and a probability list frame survey with a sample of approximately 68,100 farm operators. Enumerators conducting the probability area frame survey contact all farmers having operations within the sampled segments of land and account for their operations. From these data, estimates can be calculated. For the probability list frame survey, data from operators was collected by mail, internet, telephone, or personal interview to obtain information on these operations. Responses from the probability list frame survey sample plus data from the probability area frame survey sample of operations that were not on the list to be sampled are combined to provide another estimate of planted and harvested acreages.

Estimating procedures: National, Regional, State, and grower reported data were reviewed for reasonableness and consistency with historical estimates. Each Regional Office submits their analysis of the current situation to the Agricultural Statistics Board (ASB). Survey data are compiled to the National level and are reviewed at this level independently of each State's review. Acreage estimates were based on survey data and the historical relationship of official estimates to survey data.

Revision policy: Estimates of planted acres for spring planted crops are subject to revision in the August *Crop Production* report if conditions altered the planting intentions since the mid-year survey. Planted acres may also be revised for cotton, peanuts, and rice in the September *Crop Production* report each year; spring wheat, Durum wheat, barley, and oats only in the *Small Grains Annual* report at the end of September; and all other spring planted crops in the October *Crop Production* report. Revisions to planted acres will only be made when either special survey data, administrative data, such as Farm Service Agency program "sign up" data, or remote sensing data are available. Harvested acres may be revised any time a production forecast is made if there is strong evidence that the intended harvested area has changed since the last forecast.

Reliability: The survey used to make acreage estimates is subject to sampling and non-sampling type errors that are common to all surveys. Both types of errors for major crops generally are between 1.0 and 6.0 percent. Sampling errors represent the variability between estimates that would result if many different samples were surveyed at the same time. Sampling errors cannot be applied directly to the acreage published in this report to determine confidence intervals since the official estimates represent a composite of information from more than a single source. The relative standard errors from the 2019 area frame survey for United States planted acres were: barley 9.8 percent, corn 1.2 percent, Upland cotton 3.0 percent, sorghum 8.6 percent, soybeans 1.3 percent, other spring wheat 4.1 percent, and winter wheat 2.2 percent.

The biotechnology estimates are also subject to sampling variability because all operations planting biotech varieties are not included in the sample. The variability for the 48 corn States, as measured by the relative standard error at the United States level, is approximately 0.3 percent for all biotech varieties, 6.9 percent for insect resistant (Bt) only varieties, 3.2 percent for herbicide resistant only varieties, and 0.5 percent for stacked gene varieties. This means that chances are approximately 95 out of 100 that survey estimates will be within plus or minus 0.6 percent for all biotech varieties, 13.8 percent for insect resistant (Bt) varieties, 6.4 percent for herbicide resistant varieties, and 1.0 percent for stacked gene varieties. Variability for the 29 soybean States is approximately 0.3 percent for herbicide resistant varieties. Variability for the 17 Upland cotton States is approximately 0.2 percent for all biotech varieties, 12.6 percent for insect resistant (Bt) varieties, 8.2 percent for herbicide resistant varieties, and 0.6 percent for stacked gene varieties.

Non-sampling errors cannot be measured directly. They may occur due to incorrect reporting and/or recording, data omissions or duplications, and errors in processing. To minimize non-sampling errors, vigorous quality controls are used in the data collection process and all data are carefully reviewed for consistency and reasonableness.

A method of evaluating the reliability of acreage estimates in this report is the "Root Mean Square Error," a statistical measure based on past performances shown below for selected crops. This is computed by expressing the deviations between the planted acreage estimates and the final estimates as a percent of the final estimates and averaging the squared percentage deviations for the 1998-2017 twenty-year period; the square root of this average becomes statistically the "Root Mean Square Error." Probability statements can be made concerning expected differences in the current estimates

relative to the final estimates assuming that factors affecting this year's estimate are not different from those influencing the past 20 years.

For example, the "Root Mean Square Error" for the corn planted estimate is 0.9 percent. This means that chances are 2 out of 3 that the current corn acreage will not be above or below the final estimate by more than 0.9 percent. Chances are 9 out of 10 (90 percent confidence level) that the difference will not exceed 1.5 percent.

Also, shown in the table is a 20-year record for selected crops of the difference between the mid-year planted acres estimate and the final estimates. Using corn again as an example, changes between the mid-year estimates and the final estimates during the past 20 years have averaged 572,000 acres, ranging from 1,000 acres to 2.01 million acres. The mid-year planted acres have been below the final estimate 5 times and above 15 times. This does not imply that the mid-year planted estimate this year is likely to understate or overstate the final estimate.

Reliability June Planted Acreage Estimates

[Based on data for the past twenty years]

Crop	Root mean square error	90 percent confidence interval	Difference between forecast and final estimate				
			Thousand acres			Years	
			Average	Smallest	Largest	Below final	Above final
	(percent)	(percent)	(1,000 acres)	(1,000 acres)	(1,000 acres)	(number)	(number)
Barley	3.4	5.9	98	6	254	6	14
Corn	0.9	1.5	572	1	2,014	5	15
Oats	4.5	7.8	107	1	274	5	15
Sorghum	6.6	11.4	402	49	1,133	9	11
Soybeans	1.3	2.2	816	32	2,479	7	13
Upland cotton	3.1	5.4	323	3	992	11	9
Wheat							
Winter wheat	1.5	2.5	463	36	1,147	5	15
Durum wheat	8.9	15.4	142	3	388	7	13
Other spring	3.4	5.8	300	2	1,283	9	11

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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Anthony Prillaman, Head, Field Crops Section.....	(202) 720-2127
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
Jeff Lemmons – Oats, Soybeans.....	(202) 690-3234
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
Jorge Garcia-Pratts, Head, Fruits, Vegetables and Special Crops Section.....	(202) 720-2127
Joshua Bates– Almonds, Apples, Apricots, Asparagus, Carrots, Coffee, Onions, Plums, Prunes, Sweet Corn, Tobacco.....	(202) 720-4288
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
Greg Lemmons –Cranberries, Cucumbers, Pistachios, Potatoes, Pumpkins, Raspberries, Squash, Strawberries, Sugarbeets, Sugarcane, Sweet Potatoes, Tame Blueberries, Wild Blueberries.....	(202) 720-4285
Dan Norris – Artichokes, Cantaloupes, Dry Edible Peas, Green Peas, Lentils, Nectarines, Papayas, Peaches, Snap Beans, Spinach, Walnuts, Watermelons.....	(202) 720-3250
Daphne Schaubert – Avocados, Bell Peppers, Broccoli, Cabbage, Chickpeas, Chile Peppers, Dates, Floriculture, Grapes, Hops, Pecans.....	(202) 720-4215

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- Cornell’s Mann Library has launched a new website housing NASS’s and other agency’s archived reports. The new website, <https://usda.library.cornell.edu>. All email subscriptions containing reports will be sent from the new website, <https://usda.library.cornell.edu>. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: <https://usda.library.cornell.edu/help>. You should whitelist notifications@usda-esmis.library.cornell.edu in your email client to avoid the emails going into spam/junk folders.

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