

United States
Department of
Agriculture

National
Agricultural
Statistics
Service



Cr Pr 2-1 (99)



Crop Production 1998 Summary

January 1999

USDA



Corn for grain production was estimated at 9.76 billion bushels, up 6 percent from the 1997 crop, but down 1 percent from the November 1 forecast. The 1998 production ranks second behind the 10.1 billion bushels produced in 1994. The U. S. yield of 134.4 bushels per acre was up 7.7 bushels from a year earlier.

Sorghum grain production in 1998 was estimated at 520 million bushels, down 18 percent from 1997. Area harvested for grain was estimated at 7.7 million acres, down 16 percent from 1997. Average grain yield, at 67.3 bushels per acre, was 1.9 bushels below the 1997 average yield.

All Hay production for 1998 was estimated at 151 million tons, down slightly from the October 1 forecast and 1 percent below the 1997 total. Acreage harvested, at 60.0 million acres, is essentially unchanged from the October forecast and 2 percent below 1997. The average yield, at 2.52 tons per acre, was 1 percent below the October forecast and 1 percent above the previous year.

Rice production totaled 188 million cwt during 1998, up 3 percent from 1997. Average yield of all U.S. rice was 5,669 pounds per acre, 228 pounds below last year. Area for harvest, at 3.32 million acres, was up 7 percent from 1997. This season marked a year of acreage increases for all major rice states except California.

Soybean production in 1998 totaled 2.76 billion bushels, down slightly from the November 1 forecast but up 3 percent from 1997. The 1998 production is the highest on record, followed by the 1997 crop of 2.69 billion bushels. The average yield per acre in 1998 is estimated at 38.9 bushels, 0.3 bushel above the November 1 forecast. This is equal to the 1997 yield which is the second highest yield on record behind the 1994 yield of 41.4 bushels.

All cotton production is forecast at 13.8 million bales, up 3 percent from last month, but down 27 percent from 1997. Yield is expected to average 618 pounds per harvested acre, down 55 pounds from last year. Texas production was increased 200,000 bales from December's forecast and the yield, at 509 pounds, ties their record yield set in 1996. Georgia's production is up 150,000 bales from last month, as the open fall weather benefitted crop development.

This report was approved on January 12, 1999.



Acting Secretary of
Agriculture
Keith J. Collins



Agricultural Statistics Board
Chairperson
Rich Allen

**Principal Crops: Area Planted and Harvested,
United States, 1989-98**

Year	Planted <i>1,000 Acres</i>	Harvested <i>1,000 Acres</i>
1989	331,152	304,574
1990	326,337	307,768
1991	325,362	303,352
1992	326,453	306,652
1993	319,518	295,503
1994	323,699	307,905
1995	318,289	301,349
1996	333,682	313,202
1997	332,072	317,662
1998	329,323	310,847

¹ Crops included are corn, sorghum, oats, barley, winter wheat, rye, durum wheat, other spring wheat, rice, soybeans, peanuts, sunflower, cotton, dry edible beans, potatoes, and sugarbeets. 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.

**Principal Crops: Area Planted and Harvested by State
and United States, 1996-98¹**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
AL	2,228	2,310	2,252	2,142	2,139	2,092
AZ	835	814	775	831	806	769
AR	8,692	8,497	8,550	8,550	8,354	8,265
CA	5,202	5,193	4,944	4,760	4,664	4,420
CO	6,276	6,489	6,277	5,530	6,055	5,927
CT	119	113	101	114	108	96
DE	505	535	519	497	522	505
FL	1,109	1,120	1,124	1,084	1,089	1,028
GA	4,306	4,333	4,067	3,960	3,957	3,442
HI	46	34	34	46	34	34
ID	4,517	4,473	4,509	4,393	4,317	4,361
IL	23,801	23,600	23,751	23,063	23,386	23,552
IN	12,648	12,764	13,029	12,395	12,560	12,696
IA	24,189	24,709	24,891	23,982	24,467	24,688
KS	24,151	23,324	23,065	20,879	22,526	22,143
KY	5,844	5,531	5,869	5,640	5,268	5,637
LA	4,035	4,095	4,055	3,994	4,019	3,752
ME	325	295	285	314	288	279
MD	1,575	1,555	1,470	1,521	1,506	1,415
MA	126	124	132	120	119	129
MI	6,953	6,871	6,790	6,694	6,740	6,662
MN	20,051	20,175	20,310	19,722	19,749	19,990
MS	4,880	4,740	4,810	4,787	4,666	4,717
MO	13,360	13,387	13,629	12,879	13,210	13,330
MT	10,734	10,283	9,787	10,292	9,799	9,184
NE	18,801	19,142	18,960	18,222	18,693	18,565
NV	515	523	513	512	521	510
NH	84	79	71	82	78	70
NJ	427	439	450	394	416	408
NM	1,318	1,278	1,225	933	1,124	943
NY	3,011	3,046	2,994	2,934	2,987	2,934
NC	4,881	5,073	5,017	4,650	4,828	4,786
ND	22,501	22,273	20,801	22,087	21,152	20,131
OH	10,273	10,748	10,651	10,092	10,532	10,520
OK	11,111	10,850	10,607	8,924	9,229	8,597
OR	2,404	2,329	2,235	2,324	2,248	2,158
PA	4,140	4,304	4,347	4,035	4,195	4,247
RI	12	12	14	12	12	14
SC	1,971	1,990	1,902	1,892	1,910	1,757
SD	16,910	16,860	16,545	16,235	15,986	16,113
TN	4,899	4,799	4,836	4,603	4,547	4,574
TX	24,343	23,475	23,784	18,202	20,137	16,814
UT	1,133	1,131	1,105	1,064	1,079	1,047
VT	347	369	357	332	361	352
VA	2,925	2,842	2,931	2,781	2,705	2,768
WA	4,461	4,353	4,382	4,378	4,215	4,251
WV	657	661	659	646	654	652
WI	8,170	8,191	8,082	7,859	7,836	7,792
WY	1,831	1,886	1,779	1,780	1,819	1,692
US ²	333,682	332,072	329,323	313,202	317,662	310,847

¹ Crops included are corn, sorghum, oats, barley, winter wheat, rye, durum wheat, other spring wheat, rice, soybeans, peanuts, sunflower, cotton, dry edible beans, potatoes, and sugarbeets. 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.

² States do not add to U.S. due to sunflower unallocated acreage.

**Corn: Area Planted for All Purposes and Harvested for Grain
by State and United States, 1996-98**

State	Area Planted for All Purposes			Area Harvested for Grain		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AL	300	280	300	270	250	200
AZ	55	60	50	40	40	30
AR	240	190	235	230	185	215
CA	500	585	620	220	265	260
CO	1,000	1,090	1,180	890	980	1,070
CT ¹	37	38	35			
DE	160	170	169	154	160	155
FL	140	120	160	112	75	55
GA	580	500	500	525	450	265
ID	110	125	145	40	43	52
IL	11,000	11,200	10,600	10,800	11,050	10,450
IN	5,600	5,900	5,800	5,450	5,750	5,550
IA	12,700	12,200	12,500	12,400	11,900	12,200
KS	2,500	2,750	3,000	2,350	2,600	2,850
KY	1,300	1,270	1,300	1,200	1,150	1,180
LA	535	430	700	523	417	540
ME ¹	31	32	36			
MD	530	510	470	465	410	400
MA ¹	32	28	25			
MI	2,600	2,500	2,300	2,250	2,180	2,050
MN	7,500	7,000	7,300	6,950	6,450	6,750
MS	630	460	550	595	433	500
MO	2,650	2,700	2,650	2,540	2,600	2,500
MT	55	60	60	15	14	18
NE	8,500	8,900	8,800	8,250	8,600	8,550
NH ¹	17	17	15			
NJ	110	118	120	94	94	98
NM	130	135	140	84	85	85
NY	1,150	1,170	1,130	630	600	580
NC	1,000	960	860	900	870	770
ND	750	780	970	600	590	825
OH	3,000	3,800	3,550	2,800	3,550	3,340
OK	200	200	270	170	170	220
OR	65	50	55	37	27	33
PA	1,450	1,550	1,550	1,070	1,010	1,050
RI ¹	3	3	3			
SC	400	350	350	380	325	275
SD	4,000	3,800	3,900	3,650	3,400	3,550
TN	740	700	700	650	620	620
TX	2,100	2,000	2,400	1,770	1,750	1,850
UT	62	62	62	20	20	24
VT ¹	97	104	112			
VA	450	490	500	310	325	300
WA	170	150	160	120	95	100
WV	65	65	60	40	36	34
WI	3,900	3,850	3,700	3,000	3,050	2,950
WY	85	85	95	50	52	60
US	79,229	79,537	80,187	72,644	72,671	72,604

¹ Area harvested for grain not estimated.

**Corn for Grain: Yield and Production by State
and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	82.0	87.0	63.0	22,140	21,750	12,600
AZ	175.0	165.0	175.0	7,000	6,600	5,250
AR	125.0	125.0	100.0	28,750	23,125	21,500
CA	160.0	170.0	160.0	35,200	45,050	41,600
CO	142.0	146.0	145.0	126,380	143,080	155,150
CT ¹						
DE	143.0	105.0	100.0	22,022	16,800	15,500
FL	88.0	80.0	62.0	9,856	6,000	3,410
GA	95.0	105.0	85.0	49,875	47,250	22,525
ID	135.0	155.0	150.0	5,400	6,665	7,800
IL	136.0	129.0	141.0	1,468,800	1,425,450	1,473,450
IN	123.0	122.0	137.0	670,350	701,500	760,350
IA	138.0	138.0	145.0	1,711,200	1,642,200	1,769,000
KS	152.0	143.0	147.0	357,200	371,800	418,950
KY	124.0	103.0	115.0	148,800	118,450	135,700
LA	125.0	117.0	81.0	65,375	48,789	43,740
ME ¹						
MD	139.0	90.0	109.0	64,635	36,900	43,600
MA ¹						
MI	94.0	117.0	111.0	211,500	255,060	227,550
MN	125.0	132.0	153.0	868,750	851,400	1,032,750
MS	102.0	107.0	86.0	60,690	46,331	43,000
MO	134.0	115.0	114.0	340,360	299,000	285,000
MT	137.0	135.0	115.0	2,055	1,890	2,070
NE	143.0	132.0	145.0	1,179,750	1,135,200	1,239,750
NH ¹						
NJ	126.0	108.0	92.0	11,844	10,152	9,016
NM	175.0	175.0	165.0	14,700	14,875	14,025
NY	103.0	110.0	114.0	64,890	66,000	66,120
NC	95.0	89.0	70.0	85,500	77,430	53,900
ND	91.0	99.0	107.0	54,600	58,410	88,275
OH	111.0	134.0	141.0	310,800	475,700	470,940
OK	145.0	138.0	130.0	24,650	23,460	28,600
OR	165.0	195.0	190.0	6,105	5,265	6,270
PA	119.0	98.0	111.0	127,330	98,980	116,550
RI ¹						
SC	79.0	95.0	40.0	30,020	30,875	11,000
SD	100.0	96.0	121.0	365,000	326,400	429,550
TN	116.0	102.0	96.0	75,400	63,240	59,520
TX	112.0	138.0	100.0	198,240	241,500	185,000
UT	139.0	147.0	141.0	2,780	2,940	3,384
VT ¹						
VA	126.0	93.0	84.0	39,060	30,225	25,200
WA	185.0	190.0	190.0	22,200	18,050	19,000
WV	105.0	95.0	80.0	4,200	3,420	2,720
WI	111.0	132.0	137.0	333,000	402,600	404,150
WY	123.0	135.0	127.0	6,150	7,020	7,620
US	127.1	126.7	134.4	9,232,557	9,206,832	9,761,085

¹ Not estimated.

**Corn for Silage: Area Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Harvested			Yield			Production		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
AL	15	20	35	11.0	14.0	6.0	165	280	210
AZ	15	18	19	27.0	25.5	26.5	405	459	504
AR	5	4	5	12.0	15.0	12.0	60	60	60
CA	275	315	355	25.0	26.0	25.0	6,875	8,190	8,875
CO	90	100	100	21.5	22.5	24.0	1,935	2,250	2,400
CT	32	33	30	18.5	19.0	17.0	592	627	510
DE	5	9	10	17.0	13.0	14.0	85	117	140
FL	19	30	35	17.0	16.5	13.0	323	495	455
GA	45	40	55	14.0	17.0	10.0	630	680	550
ID	68	80	90	24.0	25.5	25.5	1,632	2,040	2,295
IL	130	120	110	14.0	16.5	15.0	1,820	1,980	1,650
IN	100	110	100	18.0	16.0	17.0	1,800	1,760	1,700
IA	250	260	250	18.0	18.0	16.5	4,500	4,680	4,125
KS	130	125	120	15.0	18.0	19.0	1,950	2,250	2,280
KY	90	110	110	16.5	14.0	15.5	1,485	1,540	1,705
LA	10	10	15	16.0	15.0	14.0	160	150	210
ME	24	28	32	14.5	16.0	16.5	348	448	528
MD	60	95	65	18.0	10.0	13.0	1,080	950	845
MA	27	23	22	19.5	20.0	19.5	527	460	429
MI	310	300	240	12.5	14.5	12.5	3,875	4,350	3,000
MN	475	450	475	13.0	15.0	16.0	6,175	6,750	7,600
MS	30	25	30	10.0	15.0	8.0	300	375	240
MO	70	80	80	15.0	14.0	12.5	1,050	1,120	1,000
MT	39	45	41	21.0	21.0	21.0	819	945	861
NE	175	225	190	16.5	15.5	17.0	2,888	3,488	3,230
NH	15	16	14	17.0	19.5	18.5	255	312	259
NJ	14	22	21	16.0	15.0	12.0	224	330	252
NM	44	49	50	21.0	21.0	23.0	924	1,029	1,150
NY	510	560	550	15.5	15.0	16.0	7,905	8,400	8,800
NC	80	85	75	13.0	14.0	9.0	1,040	1,190	675
ND	140	170	125	8.0	7.0	8.5	1,120	1,190	1,063
OH	160	190	180	14.5	18.0	17.0	2,320	3,420	3,060
OK	26	25	34	20.0	17.0	15.0	520	425	510
OR	26	22	21	27.0	26.0	23.0	702	572	483
PA	370	515	490	17.5	14.0	16.0	6,475	7,210	7,840
RI	3	3	3	16.0	16.5	18.0	48	50	54
SC	15	20	25	12.5	15.0	7.0	188	300	175
SD	320	360	320	8.7	10.5	10.5	2,784	3,780	3,360
TN	75	70	65	16.0	15.0	14.0	1,200	1,050	910
TX	100	110	150	16.0	23.5	19.0	1,600	2,585	2,850
UT	40	41	37	21.0	23.0	21.0	840	943	777
VT	82	96	107	16.5	18.0	17.0	1,353	1,728	1,819
VA	130	160	190	16.5	13.0	10.5	2,145	2,080	1,995
WA	50	55	60	26.0	28.0	25.0	1,300	1,540	1,500
WV	20	28	24	16.0	14.0	15.0	320	392	360
WI	865	770	730	13.0	15.0	14.5	11,245	11,550	10,585
WY	33	32	34	18.0	21.0	19.0	594	672	646
US	5,607	6,054	5,919	15.4	16.1	16.0	86,581	97,192	94,525

**Sorghum: Area Planted for All Purposes and Harvested for Grain,
Yield, and Production by State and United States, 1996-98**

State	Area Planted for All Purposes			Area Harvested for Grain		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AL	13	10	9	10	6	6
AR	230	160	140	220	150	130
CO	290	190	200	260	150	185
GA	65	65	50	40	40	30
IL	155	120	110	150	115	107
KS	4,800	3,650	3,500	4,600	3,400	3,300
KY	26	11	10	23	9	8
LA	155	90	130	153	88	125
MS	75	35	40	72	33	36
MO	580	420	330	560	400	320
NE	1,250	900	700	1,030	750	600
NM	255	245	200	225	227	65
NC	19	20	21	10	11	12
OK	520	490	410	490	450	340
SC	10	6	6	5	4	3
SD	230	270	200	145	160	140
TN	24	20	20	18	15	16
TX	4,400	3,350	3,550	3,800	3,150	2,300
US	13,097	10,052	9,626	11,811	9,158	7,723
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	55.0	50.0	45.0	550	300	270
AR	74.0	74.0	53.0	16,280	11,100	6,890
CO	51.0	40.0	57.0	13,260	6,000	10,545
GA	41.0	45.0	38.0	1,640	1,800	1,140
IL	84.0	91.0	74.0	12,600	10,465	7,918
KS	77.0	78.0	80.0	354,200	265,200	264,000
KY	92.0	65.0	80.0	2,116	585	640
LA	76.0	75.0	60.0	11,628	6,600	7,500
MS	70.0	75.0	65.0	5,040	2,475	2,340
MO	91.0	92.0	83.0	50,960	36,800	26,560
NE	95.0	81.0	94.0	97,850	60,750	56,400
NM	33.0	44.0	45.0	7,425	9,988	2,925
NC	57.0	50.0	45.0	570	550	540
OK	59.0	50.0	45.0	28,910	22,500	15,300
SC	50.0	43.0	35.0	250	172	105
SD	55.0	71.0	71.0	7,975	11,360	9,940
TN	90.0	70.0	70.0	1,620	1,050	1,120
TX	48.0	59.0	46.0	182,400	185,850	105,800
US	67.3	69.2	67.3	795,274	633,545	519,933

**Sorghum for Silage: Area Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Harvested			Yield			Production		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
AL	2	2	2	10.0	10.0	10.0	20	20	20
AR	5	5	6	9.0	10.0	8.0	45	50	48
CO	12	18	11	13.0	13.0	13.0	156	234	143
GA	20	15	15	10.0	10.0	9.0	200	150	135
IL	1	3	1	11.0	12.0	12.0	11	36	12
KS	120	130	80	14.0	15.0	15.0	1,680	1,950	1,200
KY	1	1	1	14.0	13.0	14.0	14	13	14
LA		1	2		10.0	10.0		10	20
MS	2	2	3	8.0	8.0	8.0	16	16	24
MO	10	9	5	8.0	11.0	10.0	80	99	50
NE	60	40	30	13.5	10.5	11.0	810	420	330
NM	11	15	12	12.0	17.0	19.0	132	255	228
NC	4	4	4	8.0	10.0	9.0	32	40	36
OK	16	22	18	15.0	12.0	7.0	240	264	126
SC	4	2	3	10.0	15.0	7.0	40	30	21
SD	60	60	30	7.5	10.5	11.0	450	630	330
TN	5	3	2	12.0	16.0	15.0	60	48	30
TX	90	80	80	11.0	14.0	9.0	990	1,120	720
US	423	412	305	11.8	13.1	11.4	4,976	5,385	3,487

**Oats: Area Planted and Harvested by State
and United States, 1996-98**

State	Area Planted ¹			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AL	35	35	35	15	20	17
AR	17	12	10	15	10	9
CA	300	350	320	30	30	30
CO	80	70	90	35	25	25
GA	60	65	50	25	30	25
ID	60	80	80	25	21	30
IL	90	100	85	70	75	70
IN	40	60	50	25	30	30
IA	285	330	280	190	230	185
KS	130	130	110	80	80	60
ME	31	26	25	28	23	24
MD	9	9	9	7	7	7
MI	70	95	120	60	80	105
MN	320	400	350	270	300	310
MO	52	40	22	29	25	13
MT	110	140	140	50	70	60
NE	165	160	170	105	90	95
NY	85	100	115	70	90	105
NC	50	55	40	20	25	20
ND	530	700	730	380	425	420
OH	120	120	120	90	90	100
OK	50	75	60	18	40	25
OR	80	80	65	35	31	35
PA	160	185	190	135	155	160
SC	50	50	40	30	25	25
SD	450	380	420	360	270	300
TX	650	550	600	100	130	130
UT	45	50	50	9	10	9
WA	28	35	30	14	17	15
WV	6	6	6	3	4	4
WI	430	510	430	300	320	300
WY	50	70	60	32	35	22
US	4,638	5,068	4,902	2,655	2,813	2,765

¹ Includes area planted preceding fall.

**Oats: Yield and Production by State
and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	45.0	48.0	48.0	675	960	816
AR	72.0	75.0	80.0	1,080	750	720
CA	75.0	80.0	75.0	2,250	2,400	2,250
CO	52.0	68.0	70.0	1,820	1,700	1,750
GA	64.0	56.0	53.0	1,600	1,680	1,325
ID	75.0	75.0	75.0	1,875	1,575	2,250
IL	66.0	74.0	56.0	4,620	5,550	3,920
IN	64.0	60.0	50.0	1,600	1,800	1,500
IA	68.0	73.0	59.0	12,920	16,790	10,915
KS	52.0	59.0	45.0	4,160	4,720	2,700
ME	75.0	73.0	73.0	2,100	1,679	1,752
MD	62.0	55.0	50.0	434	385	350
MI	60.0	61.0	46.0	3,600	4,880	4,830
MN	56.0	58.0	63.0	15,120	17,400	19,530
MO	53.0	61.0	47.0	1,537	1,525	611
MT	40.0	55.0	54.0	2,000	3,850	3,240
NE	71.0	65.0	56.0	7,455	5,850	5,320
NY	55.0	65.0	62.0	3,850	5,850	6,510
NC	60.0	64.0	58.0	1,200	1,600	1,160
ND	50.0	44.0	62.0	19,000	18,700	26,040
OH	57.0	74.0	65.0	5,130	6,660	6,500
OK	36.0	44.0	41.0	648	1,760	1,025
OR	97.0	92.0	110.0	3,395	2,852	3,850
PA	56.0	58.0	53.0	7,560	8,990	8,480
SC	54.0	56.0	45.0	1,620	1,400	1,125
SD	60.0	55.0	67.0	21,600	14,850	20,100
TX	34.0	52.0	53.0	3,400	6,760	6,890
UT	70.0	72.0	70.0	630	720	630
WA	80.0	80.0	75.0	1,120	1,360	1,125
WV	50.0	50.0	50.0	150	200	200
WI	58.0	63.0	61.0	17,400	20,160	18,300
WY	53.0	54.0	64.0	1,696	1,890	1,408
US	57.7	59.5	60.4	153,245	167,246	167,122

**Barley: Area Planted and Harvested by State
and United States, 1996-98**

State	Area Planted ¹			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AZ	55	70	58	54	67	56
CA	250	230	170	190	150	125
CO	100	95	90	92	89	82
DE	25	40	34	23	35	30
ID	750	770	780	730	750	760
KS	13	10	8	11	8	8
KY	22	9	8	20	7	7
MD	55	55	60	49	50	54
MI	28	25	30	25	22	26
MN	550	500	440	520	460	415
MT	1,250	1,250	1,350	1,150	1,150	1,200
NE	20	10	10	17	9	8
NV	6	5	5	5	5	4
NJ	3	5	6	3	4	4
NC	25	24	25	20	20	20
ND	2,650	2,400	2,000	2,600	2,250	1,930
OK	6	6	7	3	5	5
OR	160	126	150	150	116	130
PA	80	72	80	75	68	75
SC	5	4	4	4	3	3
SD	160	130	115	145	120	95
TX	16	10	10	11	5	5
UT	110	100	95	100	95	85
VA	90	75	90	75	60	70
WA	450	490	530	440	480	520
WI	90	80	80	75	65	65
WY	125	115	105	120	105	85
US	7,094	6,706	6,340	6,707	6,198	5,867

¹ Includes area planted preceding fall.

**Barley: Yield and Production by State
and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AZ	105.0	102.0	110.0	5,670	6,834	6,160
CA	60.0	57.0	60.0	11,400	8,550	7,500
CO	104.0	108.0	115.0	9,568	9,612	9,430
DE	68.0	89.0	60.0	1,564	3,115	1,800
ID	73.0	79.0	78.0	53,290	59,250	59,280
KS	33.0	42.0	35.0	363	336	280
KY	74.0	70.0	63.0	1,480	490	441
MD	61.0	80.0	64.0	2,989	4,000	3,456
MI	48.0	58.0	50.0	1,200	1,276	1,300
MN	64.0	51.0	55.0	33,280	23,460	22,825
MT	43.0	53.0	48.0	49,450	60,950	57,600
NE	53.0	51.0	50.0	901	459	400
NV	95.0	100.0	100.0	475	500	400
NJ	60.0	74.0	58.0	180	296	232
NC	65.0	68.0	57.0	1,300	1,360	1,140
ND	55.0	45.0	55.0	143,000	101,250	106,150
OK	23.0	42.0	47.0	69	210	235
OR	64.0	69.0	62.0	9,600	8,004	8,060
PA	67.0	67.0	67.0	5,025	4,556	5,025
SC	50.0	60.0	47.0	200	180	141
SD	44.0	38.0	48.0	6,380	4,560	4,560
TX	34.0	47.0	43.0	374	235	215
UT	80.0	84.0	83.0	8,000	7,980	7,055
VA	68.0	82.0	61.0	5,100	4,920	4,270
WA	62.0	74.0	65.0	27,280	35,520	33,800
WI	53.0	55.0	52.0	3,975	3,575	3,380
WY	86.0	80.0	86.0	10,320	8,400	7,310
US	58.5	58.1	60.1	392,433	359,878	352,445

**All Wheat: Area Planted and Harvested by State
and United States, 1996-98**

State	Area Planted ¹			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AL	110	130	120	80	90	85
AZ	180	100	153	178	98	152
AR	1,300	880	980	1,240	820	900
CA	780	655	680	688	544	555
CO	2,870	3,053	2,812	2,268	2,750	2,610
DE	80	75	75	78	73	73
FL	13	20	15	10	17	13
GA	380	400	290	330	350	240
ID	1,620	1,500	1,350	1,560	1,430	1,280
IL	1,650	1,150	1,250	1,100	1,090	1,200
IN	850	700	700	720	630	650
IA	52	27	40	40	25	32
KS	11,800	11,400	10,700	8,800	10,900	10,100
KY	700	650	750	530	420	550
LA	140	130	100	130	115	90
MD	235	215	225	227	210	215
MI	680	530	600	600	520	570
MN	2,595	2,520	2,015	2,542	2,415	1,982
MS	245	200	160	230	175	150
MO	1,600	1,150	1,350	1,250	1,080	1,250
MT	6,640	6,150	5,650	6,360	5,840	5,280
NE	2,300	2,000	1,900	2,100	1,900	1,800
NV	21	21	16	19	19	14
NJ	46	40	48	38	38	44
NM	470	430	415	110	285	265
NY	160	135	140	150	130	130
NC	630	730	730	590	670	680
ND	12,680	11,625	9,770	12,515	11,095	9,610
OH	1,400	1,180	1,200	1,330	1,090	1,160
OK	6,800	6,700	6,600	4,900	5,300	5,100
OR	940	955	910	920	935	885
PA	195	180	195	190	175	190
SC	280	310	265	270	300	240
SD	4,325	4,020	3,475	3,854	3,419	3,294
TN	600	550	570	380	360	370
TX	6,000	6,300	6,100	2,900	4,100	3,900
UT	202	195	179	185	189	173
VA	300	280	280	275	260	245
WA	2,800	2,690	2,670	2,745	2,580	2,565
WV	14	13	11	11	9	8
WI	162	163	148	140	152	142
WY	260	260	234	236	242	210
US	75,105	70,412	65,871	62,819	62,840	59,002

¹ Includes area planted preceding fall.

**All Wheat: Yield and Production by State
and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	44.0	42.0	42.0	3,520	3,780	3,570
AZ	90.4	89.5	104.2	16,090	8,775	15,840
AR	54.0	48.0	51.0	66,960	39,360	45,900
CA	75.2	76.6	69.5	51,750	41,680	38,550
CO	33.3	32.8	39.7	75,500	90,100	103,710
DE	53.0	73.0	51.0	4,134	5,329	3,723
FL	38.0	39.0	43.0	380	663	559
GA	48.0	44.0	43.0	15,840	15,400	10,320
ID	76.4	79.6	80.0	119,200	113,830	102,410
IL	38.0	61.0	48.0	41,800	66,490	57,600
IN	38.0	58.0	55.0	27,360	36,540	35,750
IA	35.0	42.0	40.0	1,400	1,050	1,280
KS	29.0	46.0	49.0	255,200	501,400	494,900
KY	53.0	54.0	45.0	28,090	22,680	24,750
LA	43.0	37.0	44.0	5,590	4,255	3,960
MD	52.0	68.0	50.0	11,804	14,280	10,750
MI	38.0	62.0	54.0	22,800	32,240	30,780
MN	41.9	32.0	40.6	106,582	77,300	80,444
MS	49.0	43.0	45.0	11,270	7,525	6,750
MO	39.0	54.0	46.0	48,750	58,320	57,500
MT	27.5	31.1	32.0	174,980	181,540	168,790
NE	35.0	37.0	46.0	73,500	70,300	82,800
NV	86.8	98.7	88.6	1,650	1,875	1,240
NJ	46.0	60.0	52.0	1,748	2,280	2,288
NM	37.0	35.0	30.0	4,070	9,975	7,950
NY	43.0	56.0	54.0	6,450	7,280	7,020
NC	44.0	51.0	41.0	25,960	34,170	27,880
ND	31.6	24.3	32.3	395,130	269,290	310,650
OH	39.0	63.0	64.0	51,870	68,670	74,240
OK	19.0	32.0	39.0	93,100	169,600	198,900
OR	70.7	64.6	65.0	65,085	60,390	57,490
PA	48.0	52.0	51.0	9,120	9,100	9,690
SC	45.0	50.0	32.0	12,150	15,000	7,680
SD	36.1	28.7	36.7	139,270	98,013	120,884
TN	44.0	45.0	41.0	16,720	16,200	15,170
TX	26.0	29.0	35.0	75,400	118,900	136,500
UT	40.3	46.3	51.1	7,455	8,742	8,834
VA	53.0	67.0	45.0	14,575	17,420	11,025
WA	66.5	64.0	61.4	182,670	165,120	157,425
WV	45.0	54.0	57.0	495	486	456
WI	42.4	56.1	53.8	5,940	8,531	7,635
WY	25.6	31.4	32.3	6,030	7,587	6,790
US	36.3	39.5	43.2	2,277,388	2,481,466	2,550,383

**Winter Wheat: Area Planted and Harvested by State
and United States, 1996-98**

State	Area Planted ¹			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AL	110	130	120	80	90	85
AZ	15	10	8	14	9	8
AR	1,300	880	980	1,240	820	900
CA	640	510	500	550	400	380
CO	2,800	3,000	2,750	2,200	2,700	2,550
DE	80	75	75	78	73	73
FL	13	20	15	10	17	13
GA	380	400	290	330	350	240
ID	900	910	820	860	860	770
IL	1,650	1,150	1,250	1,100	1,090	1,200
IN	850	700	700	720	630	650
IA	52	27	40	40	25	32
KS	11,800	11,400	10,700	8,800	10,900	10,100
KY	700	650	750	530	420	550
LA	140	130	100	130	115	90
MD	235	215	225	227	210	215
MI	680	530	600	600	520	570
MN	35	65	60	32	60	57
MS	245	200	160	230	175	150
MO	1,600	1,150	1,350	1,250	1,080	1,250
MT	2,150	1,600	1,400	1,980	1,450	1,250
NE	2,300	2,000	1,900	2,100	1,900	1,800
NV	10	15	7	9	14	6
NJ	46	40	48	38	38	44
NM	470	430	415	110	285	265
NY	160	135	140	150	130	130
NC	630	730	730	590	670	680
ND	80	75	70	75	65	60
OH	1,400	1,180	1,200	1,330	1,090	1,160
OK	6,800	6,700	6,600	4,900	5,300	5,100
OR	830	830	810	815	815	790
PA	195	180	195	190	175	190
SC	280	310	265	270	300	240
SD	2,000	1,650	1,500	1,580	1,150	1,420
TN	600	550	570	380	360	370
TX	6,000	6,300	6,100	2,900	4,100	3,900
UT	175	170	155	160	165	150
VA	300	280	280	275	260	245
WA	2,400	2,250	2,200	2,350	2,150	2,100
WV	14	13	11	11	9	8
WI	150	155	140	130	145	135
WY	230	240	220	210	225	200
US	51,445	47,985	46,449	39,574	41,340	40,126

¹ Includes area planted preceding fall.

**Winter Wheat: Yield and Production by State
and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	44.0	42.0	42.0	3,520	3,780	3,570
AZ	95.0	85.0	90.0	1,330	765	720
AR	54.0	48.0	51.0	66,960	39,360	45,900
CA	69.0	70.0	60.0	37,950	28,000	22,800
CO	32.0	32.0	39.0	70,400	86,400	99,450
DE	53.0	73.0	51.0	4,134	5,329	3,723
FL	38.0	39.0	43.0	380	663	559
GA	48.0	44.0	43.0	15,840	15,400	10,320
ID	80.0	80.0	82.0	68,800	68,800	63,140
IL	38.0	61.0	48.0	41,800	66,490	57,600
IN	38.0	58.0	55.0	27,360	36,540	35,750
IA	35.0	42.0	40.0	1,400	1,050	1,280
KS	29.0	46.0	49.0	255,200	501,400	494,900
KY	53.0	54.0	45.0	28,090	22,680	24,750
LA	43.0	37.0	44.0	5,590	4,255	3,960
MD	52.0	68.0	50.0	11,804	14,280	10,750
MI	38.0	62.0	54.0	22,800	32,240	30,780
MN	36.0	32.0	27.0	1,152	1,920	1,539
MS	49.0	43.0	45.0	11,270	7,525	6,750
MO	39.0	54.0	46.0	48,750	58,320	57,500
MT	31.0	38.0	39.0	61,380	55,100	48,750
NE	35.0	37.0	46.0	73,500	70,300	82,800
NV	100.0	100.0	100.0	900	1,400	600
NJ	46.0	60.0	52.0	1,748	2,280	2,288
NM	37.0	35.0	30.0	4,070	9,975	7,950
NY	43.0	56.0	54.0	6,450	7,280	7,020
NC	44.0	51.0	41.0	25,960	34,170	27,880
ND	30.0	22.0	35.0	2,250	1,430	2,100
OH	39.0	63.0	64.0	51,870	68,670	74,240
OK	19.0	32.0	39.0	93,100	169,600	198,900
OR	72.0	66.0	67.0	58,680	53,790	52,930
PA	48.0	52.0	51.0	9,120	9,100	9,690
SC	45.0	50.0	32.0	12,150	15,000	7,680
SD	35.0	30.0	43.0	55,300	34,500	61,060
TN	44.0	45.0	41.0	16,720	16,200	15,170
TX	26.0	29.0	35.0	75,400	118,900	136,500
UT	38.0	46.0	50.0	6,080	7,590	7,500
VA	53.0	67.0	45.0	14,575	17,420	11,025
WA	70.0	66.0	65.0	164,500	141,900	136,500
WV	45.0	54.0	57.0	495	486	456
WI	43.0	57.0	55.0	5,590	8,265	7,425
WY	25.0	31.0	32.0	5,250	6,975	6,400
US	37.1	44.6	46.9	1,469,618	1,845,528	1,880,605

**Durum Wheat: Area Planted, Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AZ	165	90	145	164	89	144
CA	140	145	180	138	144	175
MN	10	5	5	10	5	5
MT	290	300	450	280	290	430
ND	3,000	2,750	3,000	2,940	2,630	2,950
SD	25	20	25	24	19	24
US	3,630	3,310	3,805	3,556	3,177	3,728
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AZ	90.0	90.0	105.0	14,760	8,010	15,120
CA	100.0	95.0	90.0	13,800	13,680	15,750
MN	43.0	36.0	37.0	430	180	185
MT	25.0	26.0	28.0	7,000	7,540	12,040
ND	27.0	22.0	33.0	79,380	57,860	97,350
SD	30.0	27.0	26.0	720	513	624
US	32.6	27.6	37.8	116,090	87,783	141,069

Wheat: Production by Class, United States, 1993-98 ¹

Year	Winter			Spring			Total
	Hard Red	Soft Red	White	Hard Red	White	Durum	
	<i>1,000 Bushels</i>						
1996	759,324	419,757	290,537	630,650	61,030	116,090	2,277,388
1997	1,098,303	471,987	275,238	491,324	56,831	87,783	2,481,466
1998	1,182,092	442,639	255,874	486,781	41,928	141,069	2,550,383

¹ Wheat class estimates are based on the latest varietal data available.

**Other Spring Wheat: Area Planted, Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
CO	70	53	62	68	50	60
ID	720	590	530	700	570	510
MN	2,550	2,450	1,950	2,500	2,350	1,920
MT	4,200	4,250	3,800	4,100	4,100	3,600
NV	11	6	9	10	5	8
ND	9,600	8,800	6,700	9,500	8,400	6,600
OR	110	125	100	105	120	95
SD	2,300	2,350	1,950	2,250	2,250	1,850
UT	27	25	24	25	24	23
WA	400	440	470	395	430	465
WI	12	8	8	10	7	7
WY	30	20	14	26	17	10
US	20,030	19,117	15,617	19,689	18,323	15,148
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
CO	75.0	74.0	71.0	5,100	3,700	4,260
ID	72.0	79.0	77.0	50,400	45,030	39,270
MN	42.0	32.0	41.0	105,000	75,200	78,720
MT	26.0	29.0	30.0	106,600	118,900	108,000
NV	75.0	95.0	80.0	750	475	640
ND	33.0	25.0	32.0	313,500	210,000	211,200
OR	61.0	55.0	48.0	6,405	6,600	4,560
SD	37.0	28.0	32.0	83,250	63,000	59,200
UT	55.0	48.0	58.0	1,375	1,152	1,334
WA	46.0	54.0	45.0	18,170	23,220	20,925
WI	35.0	38.0	30.0	350	266	210
WY	30.0	36.0	39.0	780	612	390
US	35.1	29.9	34.9	691,680	548,155	528,709

Spring Wheat: Head Population

The National Agricultural Statistics Service conducted objective yield surveys in three spring wheat producing states during 1998. Randomly selected plots in wheat fields were visited monthly from August through harvest to obtain specific counts and measurements. Data in this table are derived from actual field counts.

**All Spring Wheat: Heads per Square Foot,
Selected States, 1994 - 98**

Crop and State	1994	1995	1996	1997	1998
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Other Spring					
MN	44.3 43.9	45.6 45.6	41.6 41.6	47.7 47.8	45.8 45.8
MT	27.3 27.3	30.4 30.4	25.2 25.1	25.8 25.8	29.5 29.5
ND	39.4 39.4	39.5 39.5	36.0 36.1	37.8 37.7	38.5 38.3
Durum					
ND	25.9 25.7	24.8 24.8	24.7 24.7	22.8 22.8	27.5 27.5

**Rice: Area Planted and Harvested by Class,
State, and United States, 1996-98**

Class and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	Long Grain					
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AR	918.0	1,168.0	1,333.0	910.0	1,160.0	1,323.0
CA	5.0	9.0	9.0	5.0	9.0	9.0
LA	465.0	535.0	595.0	463.0	533.0	590.0
MS	210.0	240.0	270.0	208.0	238.0	268.0
MO	95.0	120.0	142.0	93.0	115.0	140.0
TX	290.0	255.0	280.0	288.0	254.0	278.0
US	1,983.0	2,327.0	2,629.0	1,967.0	2,309.0	2,608.0
	Medium Grain					
AR	260.0	230.0	205.0	258.0	228.0	200.0
CA	484.0	493.0	435.0	482.0	491.0	433.0
LA	70.0	50.0	30.0	70.0	50.0	30.0
MO	2.0	2.0	3.0	2.0	2.0	3.0
TX	10.0	5.0	5.0	10.0	5.0	5.0
US	826.0	780.0	678.0	822.0	776.0	671.0
	Short Grain					
AR	2.0	2.0	2.0	2.0	2.0	2.0
CA	13.0	16.0	36.0	13.0	16.0	36.0
US	15.0	18.0	38.0	15.0	18.0	38.0
	All					
AR	1,180.0	1,400.0	1,540.0	1,170.0	1,390.0	1,525.0
CA	502.0	518.0	480.0	500.0	516.0	478.0
LA	535.0	585.0	625.0	533.0	583.0	620.0
MS	210.0	240.0	270.0	208.0	238.0	268.0
MO	97.0	122.0	145.0	95.0	117.0	143.0
TX	300.0	260.0	285.0	298.0	259.0	283.0
US	2,824.0	3,125.0	3,345.0	2,804.0	3,103.0	3,317.0

**Rice: Yield and Production by Class,
State, and United States, 1996-98**

Class and State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	Long Grain					
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
AR	6,050	5,620	5,740	55,055	65,192	75,940
CA	7,200	7,700	5,970	360	693	537
LA	4,900	4,640	4,530	22,687	24,731	26,727
MS	6,000	5,800	5,800	12,480	13,804	15,544
MO	5,550	5,300	5,200	5,162	6,095	7,280
TX	6,210	5,500	5,610	17,885	13,970	15,596
US	5,777	5,391	5,430	113,629	124,485	141,624
	Medium Grain					
AR	6,500	6,100	6,200	16,770	13,908	12,400
CA	7,500	8,260	6,990	36,150	40,557	30,267
LA	4,700	4,500	4,600	3,290	2,250	1,380
MO	5,550	5,300	5,200	111	106	156
TX	5,800	5,400	5,000	580	270	250
US	6,922	7,357	6,625	56,901	57,091	44,453
	Short Grain					
AR	6,000	6,000	4,000	120	120	80
CA	7,300	8,100	5,260	949	1,296	1,894
US	7,127	7,867	5,195	1,069	1,416	1,974
	All					
AR	6,150	5,700	5,800	71,945	79,220	88,420
CA	7,490	8,250	6,840	37,459	42,546	32,698
LA	4,870	4,630	4,530	25,977	26,981	28,107
MS	6,000	5,800	5,800	12,480	13,804	15,544
MO	5,550	5,300	5,200	5,273	6,201	7,436
TX	6,200	5,500	5,600	18,465	14,240	15,846
US	6,120	5,897	5,669	171,599	182,992	188,051

**Rye: Area Planted and Harvested, Yield, and Production by State
and United States, 1996-98**

State	Area Planted ¹			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
CO	28	28	33	2	2	3
GA	300	300	250	70	65	50
IL	50	55	50	6	8	9
IN	20	15	15	2	2	2
KS	60	50	80	5	10	15
MD	25	25	25	2	3	3
MI	80	75	65	13	15	15
MN	25	20	30	20	16	27
NE	40	35	35	17	12	12
NJ	25	20	38	3	5	5
NY	49	40	50	8	7	15
NC	90	80	90	20	15	20
ND	20	22	65	16	19	61
OH	35	30	35	4	4	4
OK	200	200	300	65	60	70
PA	60	50	60	6	10	15
SC	40	35	30	20	10	20
SD	40	30	40	36	26	35
TX	120	130	120	10	10	20
VA	80	80	80	8	5	5
WI	70	80	80	12	12	12
US	1,457	1,400	1,571	345	316	418
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>			
CO	25	27	28	50	54	84
GA	26	22	21	1,820	1,430	1,050
IL	31	30	37	186	240	333
IN	22	32	38	44	64	76
KS	30	30	25	150	300	375
MD	25	25	32	50	75	96
MI	27	30	28	351	450	420
MN	24	25	31	480	400	837
NE	19	20	24	323	240	288
NJ	27	35	33	81	175	165
NY	28	33	35	224	231	525
NC	25	28	22	500	420	440
ND	33	27	36	528	513	2,196
OH	31	30	35	124	120	140
OK	15	18	22	975	1,080	1,540
PA	36	40	33	216	400	495
SC	26	25	20	520	250	400
SD	41	28	40	1,476	728	1,400
TX	19	33	20	190	330	400
VA	33	40	35	264	200	175
WI	32	36	30	384	432	360
US	25.9	25.7	28.2	8,936	8,132	11,795

¹ Includes area planted preceding fall.

**Peanuts: Area Planted and Harvested, Yield,
and Production by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
AL	192.0	194.0	197.0	191.0	193.0	196.0
FL	90.0	92.0	96.0	82.0	84.0	88.0
GA	535.0	520.0	535.0	533.0	519.0	530.0
NM	16.5	18.0	20.0	16.5	17.3	20.0
NC	125.0	124.0	125.0	125.0	123.0	125.0
OK	85.0	79.0	80.0	81.0	77.0	75.0
SC	11.0	11.0	12.0	10.5	10.5	11.5
TX	270.0	320.0	370.0	265.0	315.0	345.0
VA	77.0	76.0	76.0	76.0	75.0	75.0
US	1,401.5	1,434.0	1,511.0	1,380.0	1,413.8	1,465.5
	Yield			Production ¹		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
AL	2,355	1,930	2,100	449,805	372,490	411,600
FL	2,880	2,715	2,500	236,160	228,060	220,000
GA	2,690	2,570	2,900	1,433,770	1,333,830	1,537,000
NM	2,300	2,700	2,750	37,950	46,710	55,000
NC	2,940	2,680	3,200	367,500	329,640	400,000
OK	2,410	2,400	2,300	195,210	184,800	172,500
SC	3,100	2,900	2,150	32,550	30,450	24,725
TX	2,600	2,610	2,610	689,000	822,150	900,450
VA	2,885	2,550	2,800	219,260	191,250	210,000
US	2,653	2,503	2,683	3,661,205	3,539,380	3,931,275

¹ Estimates comprised of quota and non-quota peanuts.

**Flaxseed: Area Planted and Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
MN	4	6	30	4	6	27
ND	80	125	280	77	121	277
SD	10	15	15	9	14	14
Oth Sts	2	5	11	2	5	11
US ¹	96	151	336	92	146	329
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
MN	15.0	16.0	16.0	60	96	432
ND	18.0	16.5	21.0	1,386	1,997	5,817
SD	14.0	18.0	21.0	126	252	294
Oth Sts	15.0	15.0	15.0	30	75	165
US ¹	17.4	16.6	20.4	1,602	2,420	6,708

¹ Estimates include all States except AK and HI.

**Special Oilseeds: Area Planted and Harvested, Yield,
and Production by Crop, United States, 1996-98**

Crop	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
Canola	367.0	671.0	1,127.0	347.0	631.0	1,092.0
Rapeseed	2.5	1.6	4.8	2.2	1.4	4.7
Safflower	222.0	228.0	303.0	210.0	215.0	285.0
Mustard Seed	19.0	76.3	98.9	18.6	74.7	95.6
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Canola	1,385	1,237	1,455	480,521	780,710	1,588,620
Rapeseed	1,470	1,243	1,353	3,234	1,740	6,360
Safflower	1,892	1,822	1,446	397,415	391,790	412,085
Mustard Seed	785	793	855	14,601	59,273	81,750

**Soybeans for Beans: Area Planted and Harvested
by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
AL	320	350	340	305	340	320
AR	3,550	3,650	3,550	3,500	3,600	3,400
DE	220	230	220	217	225	216
FL	35	47	35	33	45	30
GA	400	400	300	390	380	220
IL	9,900	10,000	10,700	9,850	9,950	10,650
IN	5,400	5,350	5,700	5,360	5,300	5,600
IA	9,500	10,500	10,500	9,450	10,400	10,450
KS	2,050	2,400	2,550	2,000	2,350	2,500
KY	1,200	1,240	1,220	1,180	1,220	1,200
LA	1,100	1,400	1,200	1,080	1,350	1,070
MD	490	530	470	480	520	460
MI	1,650	1,870	1,900	1,640	1,860	1,890
MN	6,000	6,600	6,900	5,900	6,550	6,800
MS	1,800	2,100	2,050	1,750	2,070	2,000
MO	4,100	4,900	5,100	4,050	4,850	5,000
NE	3,050	3,600	3,800	3,010	3,550	3,750
NJ	120	133	115	119	130	113
NY ¹			100			97
NC	1,250	1,400	1,475	1,200	1,330	1,415
ND	850	1,150	1,550	845	1,140	1,525
OH	4,500	4,350	4,400	4,490	4,340	4,390
OK	300	340	470	285	330	340
PA	290	375	400	285	370	395
SC	560	580	540	540	570	500
SD	2,700	3,300	3,450	2,670	3,250	3,420
TN	1,150	1,240	1,250	1,100	1,200	1,210
TX	290	420	440	270	400	270
VA	500	510	500	480	490	480
WI	920	1,040	1,150	870	1,000	1,100
US	64,195	70,005	72,375	63,349	69,110	70,811

¹ NY estimates began with 1998 crop year.

**Soybeans for Beans: Yield and Production
by State and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	34.0	25.0	22.0	10,370	8,500	7,040
AR	32.0	30.5	25.0	112,000	109,800	85,000
DE	35.0	29.0	33.0	7,595	6,525	7,128
FL	32.0	25.0	23.0	1,056	1,125	690
GA	26.0	21.0	21.0	10,140	7,980	4,620
IL	40.5	43.0	44.0	398,925	427,850	468,600
IN	38.0	43.5	42.0	203,680	230,550	235,200
IA	44.0	46.0	48.0	415,800	478,400	501,600
KS	37.0	37.0	30.0	74,000	86,950	75,000
KY	38.0	34.5	30.0	44,840	42,090	36,000
LA	33.0	29.0	21.0	35,640	39,150	22,470
MD	37.0	30.0	31.0	17,760	15,600	14,260
MI	28.5	38.5	39.0	46,740	71,610	73,710
MN	38.0	39.0	42.0	224,200	255,450	285,600
MS	31.0	31.0	24.0	54,250	64,170	48,000
MO	37.0	36.0	34.0	149,850	174,600	170,000
NE	45.0	40.5	44.0	135,450	143,775	165,000
NJ	37.0	31.0	28.0	4,403	4,030	3,164
NY ¹			41.0			3,977
NC	29.0	29.0	27.0	34,800	38,570	38,205
ND	29.0	29.5	32.0	24,505	33,630	48,800
OH	35.0	44.0	44.0	157,150	190,960	193,160
OK	26.0	30.0	18.0	7,410	9,900	6,120
PA	40.0	37.0	40.0	11,400	13,690	15,800
SC	25.0	22.5	21.0	13,500	12,825	10,500
SD	34.0	35.0	39.0	90,780	113,750	133,380
TN	35.0	34.0	29.0	38,500	40,800	35,090
TX	26.0	28.0	22.0	7,020	11,200	5,940
VA	34.0	23.0	23.0	16,320	11,270	11,040
WI	37.0	44.0	47.0	32,190	44,000	51,700
US	37.6	38.9	38.9	2,380,274	2,688,750	2,756,794

¹ NY estimates began with 1998 crop year.

Soybeans: Pods with Beans

The National Agricultural Statistics Service conducted objective yield surveys in 8 soybean producing States during 1998. Randomly selected plots of soybeans fields are visited monthly from August through harvest to obtain specific counts and measurements. Data in this table are actual field counts from this survey.

**Soybeans: Pods with Beans per 18 Square Feet,
Selected States, 1994-98**

State	Month	1994	1995	1996	1997	1998
		<i>Number of Pods</i>				
AR	Sep ¹					
	Nov	1,782	1,755	1,521	2,098	1,640
	Final	1,673	1,609	1,481	1,956	1,613
IL	Sep	1,745	1,816	1,505	1,828	2,087
	Nov	1,639	1,764	1,573	1,708	1,902
	Final	1,636	1,764	1,581	1,708	1,906
IN	Sep	1,850	1,755	1,416	1,622	1,883
	Nov	1,574	1,677	1,470	1,532	1,709
	Final	1,570	1,677	1,457	1,532	1,709
IA	Sep	1,887	1,739	1,654	1,894	1,914
	Nov	1,820	1,611	1,463	1,458	1,745
	Final	1,820	1,616	1,463	1,461	1,748
MN	Sep	1,678	1,613	1,543	1,585	1,598
	Nov	1,496	1,501	1,487	1,506	1,450
	Final	1,496	1,501	1,487	1,506	1,442
MO	Sep	1,470	895	1,491	1,539	1,847
	Nov	1,643	1,462	1,688	1,591	1,878
	Final	1,659	1,469	1,655	1,650	1,931
NE	Sep	1,676	1,404	1,715	1,716	1,849
	Nov	1,826	1,420	1,514	1,345	1,810
	Final	1,826	1,420	1,514	1,342	1,810
OH	Sep	1,950	1,790	1,452	1,711	1,887
	Nov	1,643	1,647	1,378	1,485	1,710
	Final	1,643	1,650	1,383	1,467	1,710

¹ Not available due to plant immaturity.

**Sunflower: Area Planted and Harvested by Type,
State, and United States, 1996-98**

Varietal Types & State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Oil						
CO	45	50	100	44	47	92
KS	215	170	160	210	165	155
MN	100	75	90	97	72	87
NE	23	25	39	22	24	38
ND	900	1,150	1,600	890	1,100	1,580
SD	640	750	900	633	745	885
TX	9	23	12	8	22	11
Oth Sts	35	41	36	30	37	32
US ¹	1,967	2,284	2,937	1,934	2,212	2,880
Non-Oil						
CO	65	35	45	63	33	43
KS	50	30	20	45	28	20
MN	50	30	40	48	27	38
NE	24	30	31	22	29	30
ND	280	320	390	275	310	380
SD	60	75	40	57	72	39
TX	22	65	35	20	63	33
Oth Sts	18	19	15	15	18	13
US ¹	569	604	616	545	580	596
All						
CO	110	85	145	107	80	135
KS	265	200	180	255	193	175
MN	150	105	130	145	99	125
NE	47	55	70	44	53	68
ND	1,180	1,470	1,990	1,165	1,410	1,960
SD	700	825	940	690	817	924
TX	31	88	47	28	85	44
Oth Sts	53	60	51	45	55	45
US ¹	2,536	2,888	3,553	2,479	2,792	3,476

¹ Estimates include all States except AK and HI.

**Sunflower: Yield and Production by Type,
State, and United States, 1996-98**

Varietal Types & State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Oil						
CO	1,450	1,200	1,350	63,800	56,400	124,200
KS	1,370	1,200	1,570	287,700	198,000	243,350
MN	1,300	1,100	1,350	126,100	79,200	117,450
NE	1,300	1,150	1,240	28,600	27,600	47,120
ND	1,500	1,330	1,540	1,335,000	1,463,000	2,433,200
SD	1,520	1,470	1,640	962,160	1,095,150	1,451,400
TX	900	1,000	600	7,200	22,000	6,600
Oth Sts	1,107	1,199	1,117	33,203	44,350	35,734
US ¹	1,470	1,350	1,548	2,843,763	2,985,700	4,459,054
Non-Oil						
CO	1,000	900	1,150	63,000	29,700	49,450
KS	870	900	1,200	39,150	25,200	24,000
MN	1,220	1,000	1,250	58,560	27,000	47,500
NE	900	1,080	1,130	19,800	31,320	33,900
ND	1,450	1,290	1,420	398,750	399,900	539,600
SD	1,650	1,390	1,430	94,050	100,080	55,770
TX	1,250	900	700	25,000	56,700	23,100
Oth Sts	1,151	1,186	1,102	17,270	21,352	14,327
US ¹	1,313	1,192	1,322	715,580	691,252	787,647
All						
CO	1,185	1,076	1,286	126,800	86,100	173,650
KS	1,282	1,156	1,528	326,850	223,200	267,350
MN	1,274	1,073	1,320	184,660	106,200	164,950
NE	1,100	1,112	1,191	48,400	58,920	81,020
ND	1,488	1,321	1,517	1,733,750	1,862,900	2,972,800
SD	1,531	1,463	1,631	1,056,210	1,195,230	1,507,170
TX	1,150	926	675	32,200	78,700	29,700
Oth Sts	1,122	1,195	1,112	50,473	65,702	50,061
US ¹	1,436	1,317	1,509	3,559,343	3,676,952	5,246,701

¹ Estimates include all States except AK and HI.

**Cotton: Area Planted and Harvested by Type, State,
and United States, 1996-98**

Type and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Upland						
AL	520.0	535.0	495.0	516.0	442.0	475.0
AZ	315.0	325.0	250.0	314.0	324.0	248.0
AR	1,000.0	980.0	920.0	990.0	965.0	900.0
CA	1,000.0	880.0	650.0	995.0	875.0	620.0
FL	99.0	100.0	89.0	98.2	99.0	80.0
GA	1,340.0	1,440.0	1,400.0	1,336.0	1,425.0	1,320.0
KS	4.5	12.0	17.0	4.0	10.0	16.0
LA	890.0	655.0	535.0	885.0	650.0	525.0
MS	1,120.0	985.0	950.0	1,100.0	970.0	940.0
MO	390.0	395.0	370.0	385.0	390.0	357.0
NM	59.0	70.0	60.0	55.0	66.0	58.0
NC	740.0	690.0	710.0	730.0	685.0	705.0
OK	290.0	200.0	160.0	210.0	190.0	120.0
SC	284.0	290.0	290.0	282.0	286.0	286.0
TN	540.0	490.0	450.0	530.0	480.0	445.0
TX	5,700.0	5,500.0	5,650.0	4,100.0	5,200.0	3,300.0
VA	103.0	101.0	92.0	102.0	100.0	91.0
US	14,394.5	13,648.0	13,088.0	12,632.2	13,157.0	10,486.0
Amer-Pima						
AZ	42.0	22.0	15.9	41.9	22.0	15.5
CA	165.0	185.0	200.0	164.0	184.0	180.0
NM	14.0	11.0	9.0	14.0	11.0	9.0
TX	37.0	32.0	105.0	36.0	32.0	32.0
US	258.0	250.0	329.9	255.9	249.0	236.5
All						
AL	520.0	535.0	495.0	516.0	442.0	475.0
AZ	357.0	347.0	265.9	355.9	346.0	263.5
AR	1,000.0	980.0	920.0	990.0	965.0	900.0
CA	1,165.0	1,065.0	850.0	1,159.0	1,059.0	800.0
FL	99.0	100.0	89.0	98.2	99.0	80.0
GA	1,340.0	1,440.0	1,400.0	1,336.0	1,425.0	1,320.0
KS	4.5	12.0	17.0	4.0	10.0	16.0
LA	890.0	655.0	535.0	885.0	650.0	525.0
MS	1,120.0	985.0	950.0	1,100.0	970.0	940.0
MO	390.0	395.0	370.0	385.0	390.0	357.0
NM	73.0	81.0	69.0	69.0	77.0	67.0
NC	740.0	690.0	710.0	730.0	685.0	705.0
OK	290.0	200.0	160.0	210.0	190.0	120.0
SC	284.0	290.0	290.0	282.0	286.0	286.0
TN	540.0	490.0	450.0	530.0	480.0	445.0
TX	5,737.0	5,532.0	5,755.0	4,136.0	5,232.0	3,332.0
VA	103.0	101.0	92.0	102.0	100.0	91.0
US	14,652.5	13,898.0	13,417.9	12,888.1	13,406.0	10,722.5

**Cotton: Yield and Production by Type, State,
and United States, 1996-98**

Type and State	Yield			Production ¹		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Bales</i> ²	<i>1,000 Bales</i> ²	<i>1,000 Bales</i> ²
Upland						
AL	734	597	576	789.0	550.0	570.0
AZ	1,189	1,255	1,123	778.0	847.0	580.0
AR	793	837	651	1,636.0	1,683.0	1,220.0
CA	1,153	1,202	890	2,390.0	2,191.0	1,150.0
FL	637	577	408	130.4	119.1	68.0
GA	747	646	564	2,079.0	1,919.0	1,550.0
KS	492	418	402	4.1	8.7	13.4
LA	697	728	590	1,286.0	986.0	645.0
MS	819	901	740	1,876.0	1,821.0	1,450.0
MO	737	695	471	591.0	565.0	350.0
NM	733	676	745	84.0	93.0	90.0
NC	659	652	684	1,002.0	930.0	1,005.0
OK	306	462	560	134.0	183.0	140.0
SC	774	688	587	455.0	410.0	350.0
TN	611	662	588	675.0	662.0	545.0
TX	509	474	509	4,345.0	5,140.0	3,500.0
VA	748	659	737	159.0	137.2	139.8
US	700	666	612	18,413.5	18,245.0	13,366.2
Amer-Pima						
AZ	852	912	743	74.4	41.8	24.0
CA	1,098	1,141	920	375.0	437.2	345.0
NM	651	641	587	19.0	14.7	11.0
TX	801	815	750	60.1	54.3	50.0
US	991	1,056	873	528.5	548.0	430.0
All						
AL	734	597	576	789.0	550.0	570.0
AZ	1,150	1,233	1,100	852.4	888.8	604.0
AR	793	837	651	1,636.0	1,683.0	1,220.0
CA	1,145	1,191	897	2,765.0	2,628.2	1,495.0
FL	637	577	408	130.4	119.1	68.0
GA	747	646	564	2,079.0	1,919.0	1,550.0
KS	492	418	402	4.1	8.7	13.4
LA	697	728	590	1,286.0	986.0	645.0
MS	819	901	740	1,876.0	1,821.0	1,450.0
MO	737	695	471	591.0	565.0	350.0
NM	717	671	724	103.0	107.7	101.0
NC	659	652	684	1,002.0	930.0	1,005.0
OK	306	462	560	134.0	183.0	140.0
SC	774	688	587	455.0	410.0	350.0
TN	611	662	588	675.0	662.0	545.0
TX	511	477	511	4,405.1	5,194.3	3,550.0
VA	748	659	737	159.0	137.2	139.8
US	705	673	618	18,942.0	18,793.0	13,796.2

¹ Production ginned and to be ginned.

² 480-lb. net weight bales.

Cottonseed: Production by State and United States, 1996-98

State	Production		
	1996	1997	1998
	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
AL	273.0	196.0	196.0
AZ	324.0	312.0	225.0
AR	635.0	632.0	471.0
CA	1,020.0	942.0	547.0
FL	46.0	45.0	25.0
GA	681.0	660.0	526.0
KS	1.4	3.1	4.6
LA	499.0	359.0	240.0
MS	735.0	704.0	567.0
MO	234.0	223.0	142.0
NM	38.1	40.5	37.0
NC	343.0	321.0	349.0
OK	56.0	72.0	59.0
SC	155.0	142.0	121.0
TN	262.0	260.0	215.0
TX	1,784.0	1,983.0	1,410.0
VA	57.0	40.0	47.0
US	7,143.5	6,934.6	5,181.6

¹ Estimates based on 3-year average lint-seed ratio.

All Hay: Area Harvested and Yield by State and United States, 1996-98

State	Area Harvested			Yield		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
AL	730	770	750	2.40	2.25	2.10
AZ	179	230	240	7.53	7.42	7.25
AR	1,175	1,225	1,175	2.01	2.02	1.91
CA	1,450	1,510	1,570	5.52	5.57	5.17
CO	1,510	1,590	1,410	2.77	2.98	3.26
CT	80	72	63	2.03	1.90	2.03
DE	15	15	16	4.27	3.20	3.44
FL	240	250	230	2.60	2.60	2.50
GA	600	600	650	2.80	2.60	2.30
ID	1,280	1,300	1,430	3.72	3.64	3.88
IL	950	970	950	3.01	3.26	3.57
IN	725	725	750	2.79	3.22	3.59
IA	1,650	1,650	1,570	3.22	3.15	3.40
KS	2,500	2,700	2,900	2.80	2.53	2.77
KY	2,400	2,100	2,350	2.38	2.21	2.43
LA	310	395	330	2.70	2.60	2.20
ME	185	165	158	1.82	1.53	1.77
MD	220	200	200	3.17	2.51	3.16
MA	90	92	103	2.00	1.82	1.96
MI	1,300	1,250	1,250	3.22	3.01	2.85
MN	2,225	2,325	2,400	2.70	2.75	2.96
MS	800	720	790	2.50	2.50	2.20
MO	3,880	3,650	3,650	1.87	2.01	2.11
MT	2,600	2,600	2,500	1.89	2.11	2.01
NE	3,150	3,200	3,200	2.37	2.12	2.40
NV	480	490	485	3.16	3.07	3.21
NH	67	62	56	1.75	1.69	1.96
NJ	120	120	120	2.24	2.35	1.98
NM	350	345	360	4.21	4.34	4.30
NY	1,510	1,530	1,400	2.30	2.25	2.22
NC	645	650	670	2.12	2.13	2.22
ND	2,900	3,150	2,600	1.66	1.39	1.61
OH	1,200	1,250	1,330	2.83	3.08	2.91
OK	2,660	2,560	2,250	1.86	2.00	1.50
OR	1,070	1,035	970	3.03	3.16	3.48
PA	1,880	1,870	1,850	2.44	2.20	2.12
RI	8	8	10	2.38	2.00	2.20
SC	280	300	320	2.00	2.10	2.00
SD	4,300	4,100	4,000	1.91	1.90	2.04
TN	1,790	1,740	1,785	2.13	2.13	2.22
TX	4,350	4,435	4,040	1.80	2.47	1.70
UT	705	715	710	3.57	3.80	3.91
VT	250	265	245	2.03	1.97	2.06
VA	1,270	1,170	1,260	2.33	1.94	2.07
WA	800	780	750	3.93	3.95	4.21
WV	570	575	580	1.87	1.91	1.99
WI	2,500	2,370	2,400	2.42	2.68	2.65
WY	1,220	1,260	1,190	1.81	2.06	2.05
US	61,169	61,084	60,016	2.45	2.50	2.52

All Hay: Production by State and United States, 1996-98

State	Production		
	1996	1997	1998
	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
AL	1,752	1,733	1,575
AZ	1,347	1,706	1,740
AR	2,360	2,470	2,250
CA	8,008	8,408	8,115
CO	4,180	4,739	4,602
CT	162	137	128
DE	64	48	55
FL	624	650	575
GA	1,680	1,560	1,495
ID	4,760	4,730	5,549
IL	2,860	3,159	3,395
IN	2,020	2,333	2,690
IA	5,310	5,190	5,332
KS	7,010	6,840	8,020
KY	5,700	4,635	5,705
LA	837	1,027	726
ME	336	253	280
MD	698	501	632
MA	180	167	202
MI	4,190	3,760	3,565
MN	5,998	6,398	7,110
MS	2,000	1,800	1,738
MO	7,270	7,340	7,703
MT	4,920	5,480	5,020
NE	7,455	6,790	7,680
NV	1,516	1,506	1,556
NH	117	105	110
NJ	269	282	237
NM	1,475	1,497	1,548
NY	3,468	3,444	3,110
NC	1,365	1,383	1,486
ND	4,825	4,375	4,190
OH	3,400	3,850	3,875
OK	4,940	5,108	3,380
OR	3,244	3,266	3,374
PA	4,585	4,106	3,915
RI	19	16	22
SC	560	630	640
SD	8,200	7,810	8,160
TN	3,811	3,702	3,969
TX	7,815	10,955	6,870
UT	2,516	2,718	2,778
VT	507	522	504
VA	2,962	2,273	2,604
WA	3,140	3,084	3,156
WV	1,066	1,101	1,157
WI	6,050	6,353	6,370
WY	2,208	2,596	2,445
US	149,779	152,536	151,338

**Alfalfa and Alfalfa Mixtures for Hay: Area Harvested
and Yield by State and United States, 1996-98**

State	Area Harvested			Yield		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
AZ	160	190	200	8.00	8.20	8.00
AR	25	25	25	2.40	2.80	2.60
CA	940	950	1,020	7.00	7.20	6.50
CO	860	840	810	3.50	3.90	4.20
CT	15	12	8	2.50	2.40	2.20
DE	7	7	8	4.60	3.40	3.60
ID	1,000	1,000	1,130	4.20	4.10	4.30
IL	550	580	600	3.60	3.90	4.20
IN	425	400	400	3.20	3.80	4.10
IA	1,200	1,200	1,250	3.60	3.50	3.60
KS	800	900	1,000	4.30	4.00	4.60
KY	300	250	250	3.60	3.00	3.50
ME	10	10	13	3.00	2.00	2.50
MD	60	55	55	4.70	3.30	4.10
MA	15	17	18	2.00	2.30	1.80
MI	950	900	850	3.60	3.40	3.30
MN	1,475	1,475	1,550	3.10	3.30	3.60
MO	480	450	450	2.75	2.80	3.25
MT	1,700	1,650	1,700	2.10	2.40	2.20
NE	1,400	1,300	1,400	3.70	3.25	3.75
NV	250	260	260	4.50	4.20	4.60
NH	12	8	8	1.95	2.00	3.00
NJ	25	25	30	3.50	2.90	2.80
NM	250	255	270	5.10	5.20	5.10
NY	640	640	600	2.70	2.60	2.45
NC	15	20	20	2.80	3.00	2.80
ND	1,700	1,750	1,400	1.85	1.50	1.75
OH	700	600	550	3.00	3.60	3.50
OK	360	360	350	3.50	3.80	2.60
OR	460	420	400	4.40	4.70	4.80
PA	750	740	700	3.10	2.80	2.80
RI	2	2	2	2.90	2.40	3.00
SD	2,500	2,300	2,400	2.20	2.30	2.40
TN	40	40	35	3.40	3.30	3.40
TX	150	135	140	4.50	4.70	4.50
UT	545	545	545	4.00	4.30	4.40
VT	65	45	45	2.10	2.30	2.30
VA	120	120	120	3.60	2.75	2.70
WA	490	480	480	4.70	4.80	5.00
WV	40	55	50	2.80	3.00	3.00
WI	2,100	1,900	1,900	2.50	2.75	2.80
WY	620	640	600	2.40	2.70	2.60
US	24,206	23,551	23,642	3.27	3.33	3.47

**Alfalfa and Alfalfa Mixtures for Hay: Production
by State and United States, 1996-98**

State	Production		
	1996 <i>1,000 Tons</i>	1997 <i>1,000 Tons</i>	1998 <i>1,000 Tons</i>
AZ	1,280	1,558	1,600
AR	60	70	65
CA	6,580	6,840	6,630
CO	3,010	3,276	3,402
CT	38	29	18
DE	32	24	29
ID	4,200	4,100	4,859
IL	1,980	2,262	2,520
IN	1,360	1,520	1,640
IA	4,320	4,200	4,500
KS	3,440	3,600	4,600
KY	1,080	750	875
ME	30	20	33
MD	282	182	226
MA	30	39	32
MI	3,420	3,060	2,805
MN	4,573	4,868	5,580
MO	1,320	1,260	1,463
MT	3,570	3,960	3,740
NE	5,180	4,225	5,250
NV	1,125	1,092	1,196
NH	23	16	24
NJ	88	73	84
NM	1,275	1,326	1,377
NY	1,728	1,664	1,470
NC	42	60	56
ND	3,145	2,625	2,450
OH	2,100	2,160	1,925
OK	1,260	1,368	910
OR	2,024	1,974	1,920
PA	2,325	2,072	1,960
RI	6	5	6
SD	5,500	5,290	5,760
TN	136	132	119
TX	675	635	630
UT	2,180	2,344	2,398
VT	137	104	104
VA	432	330	324
WA	2,303	2,304	2,400
WV	112	165	150
WI	5,250	5,225	5,320
WY	1,488	1,728	1,560
US	79,139	78,535	82,010

**All Other Hay: Area Harvested and Yield
by State and United States, 1996-98**

State	Area Harvested			Yield		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
AL	730	770	750	2.40	2.25	2.10
AZ	19	40	40	3.50	3.70	3.50
AR	1,150	1,200	1,150	2.00	2.00	1.90
CA	510	560	550	2.80	2.80	2.70
CO	650	750	600	1.80	1.95	2.00
CT	65	60	55	1.90	1.80	2.00
DE	8	8	8	4.00	3.00	3.30
FL	240	250	230	2.60	2.60	2.50
GA	600	600	650	2.80	2.60	2.30
ID	280	300	300	2.00	2.10	2.30
IL	400	390	350	2.20	2.30	2.50
IN	300	325	350	2.20	2.50	3.00
IA	450	450	320	2.20	2.20	2.60
KS	1,700	1,800	1,900	2.10	1.80	1.80
KY	2,100	1,850	2,100	2.20	2.10	2.30
LA	310	395	330	2.70	2.60	2.20
ME	175	155	145	1.75	1.50	1.70
MD	160	145	145	2.60	2.20	2.80
MA	75	75	85	2.00	1.70	2.00
MI	350	350	400	2.20	2.00	1.90
MN	750	850	850	1.90	1.80	1.80
MS	800	720	790	2.50	2.50	2.20
MO	3,400	3,200	3,200	1.75	1.90	1.95
MT	900	950	800	1.50	1.60	1.60
NE	1,750	1,900	1,800	1.30	1.35	1.35
NV	230	230	225	1.70	1.80	1.60
NH	55	54	48	1.70	1.65	1.80
NJ	95	95	90	1.90	2.20	1.70
NM	100	90	90	2.00	1.90	1.90
NY	870	890	800	2.00	2.00	2.05
NC	630	630	650	2.10	2.10	2.20
ND	1,200	1,400	1,200	1.40	1.25	1.45
OH	500	650	780	2.60	2.60	2.50
OK	2,300	2,200	1,900	1.60	1.70	1.30
OR	610	615	570	2.00	2.10	2.55
PA	1,130	1,130	1,150	2.00	1.80	1.70
RI	6	6	8	2.20	1.80	2.00
SC	280	300	320	2.00	2.10	2.00
SD	1,800	1,800	1,600	1.50	1.40	1.50
TN	1,750	1,700	1,750	2.10	2.10	2.20
TX	4,200	4,300	3,900	1.70	2.40	1.60
UT	160	170	165	2.10	2.20	2.30
VT	185	220	200	2.00	1.90	2.00
VA	1,150	1,050	1,140	2.20	1.85	2.00
WA	310	300	270	2.70	2.60	2.80
WV	530	520	530	1.80	1.80	1.90
WI	400	470	500	2.00	2.40	2.10
WY	600	620	590	1.20	1.40	1.50
US	36,963	37,533	36,374	1.91	1.97	1.91

**All Other Hay: Production by State
and United States, 1996-98**

State	Production		
	1996 <i>1,000 Tons</i>	1997 <i>1,000 Tons</i>	1998 <i>1,000 Tons</i>
AL	1,752	1,733	1,575
AZ	67	148	140
AR	2,300	2,400	2,185
CA	1,428	1,568	1,485
CO	1,170	1,463	1,200
CT	124	108	110
DE	32	24	26
FL	624	650	575
GA	1,680	1,560	1,495
ID	560	630	690
IL	880	897	875
IN	660	813	1,050
IA	990	990	832
KS	3,570	3,240	3,420
KY	4,620	3,885	4,830
LA	837	1,027	726
ME	306	233	247
MD	416	319	406
MA	150	128	170
MI	770	700	760
MN	1,425	1,530	1,530
MS	2,000	1,800	1,738
MO	5,950	6,080	6,240
MT	1,350	1,520	1,280
NE	2,275	2,565	2,430
NV	391	414	360
NH	94	89	86
NJ	181	209	153
NM	200	171	171
NY	1,740	1,780	1,640
NC	1,323	1,323	1,430
ND	1,680	1,750	1,740
OH	1,300	1,690	1,950
OK	3,680	3,740	2,470
OR	1,220	1,292	1,454
PA	2,260	2,034	1,955
RI	13	11	16
SC	560	630	640
SD	2,700	2,520	2,400
TN	3,675	3,570	3,850
TX	7,140	10,320	6,240
UT	336	374	380
VT	370	418	400
VA	2,530	1,943	2,280
WA	837	780	756
WV	954	936	1,007
WI	800	1,128	1,050
WY	720	868	885
US	70,640	74,001	69,328

**Dry Edible Beans: Area Planted and Harvested, Yield, and Production
by State and United States, 1996-98¹**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
CA	128.0	135.0	110.0	123.0	132.0	105.0
CO	145.0	135.0	170.0	125.0	120.0	155.0
ID	95.0	100.0	105.0	93.0	98.0	103.0
KS	28.0	22.0	20.0	24.0	20.0	19.0
MI	340.0	315.0	300.0	320.0	305.0	295.0
MN	160.0	175.0	190.0	155.0	165.0	175.0
MT	10.5	12.2	12.6	10.3	11.7	12.2
NE	205.0	190.0	195.0	195.0	180.0	188.0
NM	12.0	12.0	10.5	12.0	12.0	9.5
NY	30.0	44.0	31.0	29.0	43.5	30.0
ND	580.0	620.0	750.0	570.0	565.0	710.0
OR	9.2	9.0	8.7	8.8	8.9	8.6
TX	13.0	15.0	15.0	10.0	14.0	13.5
UT	5.0	5.8	6.0	0.6	5.2	5.9
WA	37.0	38.0	40.0	35.0	38.0	40.0
WI	9.3	9.8	7.3	9.0	9.5	7.2
WY	32.0	32.0	39.0	31.0	31.0	37.0
US	1,839.0	1,869.8	2,010.1	1,750.7	1,758.8	1,913.9
	Yield per Acre			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
CA	1,890	2,270	1,950	2,325	3,000	2,048
CO	1,800	1,900	1,850	2,250	2,280	2,868
ID	2,050	2,200	2,050	1,907	2,156	2,112
KS	1,850	1,900	2,000	444	380	380
MI	1,450	1,620	1,500	4,640	4,941	4,425
MN	1,560	1,550	1,450	2,418	2,558	2,538
MT	2,280	2,200	2,180	235	257	266
NE	1,900	2,060	1,950	3,705	3,708	3,666
NM	2,200	1,700	1,800	264	204	171
NY	1,300	1,560	1,420	377	679	426
ND	1,320	1,260	1,380	7,524	7,119	9,798
OR	1,800	2,040	1,770	158	182	152
TX	840	1,020	1,000	84	143	135
UT	1,600	800	510	10	42	30
WA	2,030	2,240	2,230	710	850	890
WI	1,800	1,800	1,600	162	171	115
WY	2,250	2,260	2,180	699	700	808
US	1,594	1,670	1,611	27,912	29,370	30,828

¹ Excludes beans grown for garden seed.

**Dry Edible Beans: Area Planted and Harvested by Commercial
Class, State, and Total, 1996-98**

Class and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Large Lima						
CA	21.0	30.0	26.0	20.0	29.0	25.0
Baby Lima						
CA	24.0	37.0	13.0	23.0	36.0	12.0
Navy						
CO		0.2	0.6		0.2	0.6
ID	7.3	3.8	1.5	7.2	3.7	1.5
KS	1.1			0.9		
MI	210.0	150.0	75.0	200.0	145.0	74.0
MN	50.0	58.0	52.0	48.9	56.0	47.0
NE	5.0	6.0	5.0	4.6	5.9	4.8
NM	5.0	5.0	2.0	5.0	5.0	2.0
ND	135.0	160.0	120.0	133.0	147.0	114.0
OR	1.8	0.9	0.4	1.8	0.9	0.4
WY	3.0	2.0		2.9	1.9	
Total	418.2	385.9	256.5	404.3	365.6	244.3
Great Northern						
CO	1.3	0.3	0.2	1.3	0.3	0.2
ID	7.8	5.5	7.5	7.7	5.4	7.4
KS	2.5	1.4		2.3	1.3	
MN	3.0	3.0	3.5	2.8	2.5	3.1
NE	100.0	96.0	97.0	94.6	94.0	93.2
WA	2.2			2.2		
WY	4.0	4.0	6.0	3.9	3.9	5.5
Total	120.8	110.2	114.2	114.8	107.4	109.4
Small White						
ID	3.1	3.3	1.5	3.0	3.2	1.4
OR	0.5	1.3	0.3	0.5	1.3	0.3
WA	2.0	3.5	1.0	2.0	3.5	1.0
Total	5.6	8.1	2.8	5.5	8.0	2.7

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Dry Edible Beans: Yield and Production by Commercial Class, State, and Total, 1996-98 (continued)

Class and State	Yield per Acre			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Large Lima						
CA	1,970	2,480	1,920	394	718	480
Baby Lima						
CA	2,250	2,510	2,580	517	902	310
Navy						
CO		1,500	1,500		3	9
ID	2,110	2,460	2,330	152	91	35
KS	2,000			18		
MI	1,400	1,580	1,600	2,800	2,290	1,180
MN	1,600	1,650	1,610	783	926	755
NE	2,070	1,980	2,130	95	117	102
NM	2,200	1,840	2,000	110	92	40
ND	1,450	1,320	1,550	1,929	1,943	1,767
OR	2,330	2,330	2,250	42	21	9
WY	1,900	2,160		55	41	
Total	1,480	1,511	1,595	5,984	5,524	3,897
Great Northern						
CO	1,620	1,670	1,500	21	5	3
ID	2,170	2,220	2,140	167	120	158
KS	1,610	1,690		37	22	
MN	1,710	1,600	1,390	48	40	43
NE	1,920	2,100	1,990	1,817	1,974	1,855
WA	2,360			52		
WY	2,490	2,310	2,310	97	90	127
Total	1,950	2,096	1,998	2,239	2,251	2,186
Small White						
ID	1,900	2,410	2,210	57	77	31
OR	2,000	2,150	2,330	10	28	7
WA	2,300	2,230	2,200	46	78	22
Total	2,055	2,288	2,222	113	183	60

**Dry Edible Beans: Area Planted and Harvested by Commercial
Class, State, and Total, 1996-98**

Class and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Pinto						
CO	134.7	119.0	152.0	115.2	105.5	138.0
ID	45.9	39.0	44.2	45.4	38.2	43.5
KS	22.5	18.0	18.5	19.5	16.4	17.7
MI	9.0	10.0	21.0	8.0	10.0	20.0
MN	45.0	43.0	55.0	44.0	41.0	52.0
MT	10.5	12.2	12.2	10.3	11.7	12.0
NE	88.0	67.0	76.0	84.3	59.7	73.7
NM	6.7	7.0	5.5	6.7	7.0	4.5
ND	413.0	415.0	540.0	405.0	376.0	510.0
OR	2.2	1.3	2.2	2.0	1.3	2.2
TX	1.0	1.5	0.5	0.9	1.4	0.5
UT	5.0	5.8	6.0	0.6	5.2	5.9
WA	14.2	10.0	16.0	13.0	10.0	16.0
WY	24.0	25.0	28.0	23.3	24.3	27.0
Total	821.7	773.8	977.1	778.2	707.7	923.0
Light Red Kidney						
CA	10.0	10.0	9.5	10.0	10.0	8.5
CO	8.7	12.2	10.0	8.2	11.2	9.4
ID	0.9	1.1	1.6	0.8	1.1	1.6
MI	12.0	14.0	14.0	10.0	14.0	13.0
MN	10.0	10.0	11.0	9.4	9.5	10.5
NE	10.0	17.0	13.0	9.7	16.6	12.6
NY	16.5	25.0	16.0	16.0	24.5	15.5
WA			0.9			0.9
Total	68.1	89.3	76.0	64.1	86.9	72.0
Dark Red Kidney						
CA	5.0	5.0	5.5	5.0	5.0	5.5
ID	0.5	0.5	0.9	0.5	0.5	0.9
MI	11.0	12.0	9.0	9.0	11.5	9.0
MN	37.0	36.0	34.0	36.0	34.0	32.0
NY	3.5	2.0	2.0	3.0	2.0	2.0
ND	3.0	1.8	5.5	3.0	1.6	5.2
WI	9.3	9.8	7.3	9.0	9.5	7.2
Total	69.3	67.1	64.2	65.5	64.1	61.8
Pink						
CA	8.0	4.0	5.5	8.0	4.0	5.5
ID	7.5	14.4	17.6	7.4	14.2	17.2
MN	5.0	8.0	11.0	4.7	7.5	10.3
NM	0.3			0.3		
ND	7.0	8.0	13.0	7.0	7.0	12.6
WA	3.1	3.7	6.0	3.1	3.7	6.0
Total	30.9	38.1	53.1	30.5	36.4	51.6

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**Dry Edible Beans: Yield and Production by Commercial
Class, State, and Total, 1996-98 (continued)**

Class and State	Yield per Acre			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Pinto						
CO	1,830	1,890	1,900	2,112	1,991	2,617
ID	2,150	2,200	2,100	976	842	914
KS	1,900	1,920	2,000	370	315	354
MI	1,500	1,400	1,470	120	140	293
MN	1,300	1,350	1,400	573	555	726
MT	2,280	2,200	2,200	235	257	264
NE	1,850	1,990	1,880	1,560	1,188	1,386
NM	2,180	1,600	2,040	146	112	92
ND	1,270	1,240	1,340	5,138	4,644	6,832
OR	2,000	2,310	1,910	40	30	42
TX	890	1,210	600	8	17	3
UT	1,600	800	510	10	42	30
WA	2,390	2,350	2,380	311	235	380
WY	2,250	2,270	2,140	524	552	578
Total	1,558	1,543	1,572	12,123	10,920	14,511
Light Red Kidney						
CA	1,870	1,980	1,600	187	198	136
CO	1,390	2,210	1,810	114	248	170
ID	2,130	2,450	2,000	17	27	32
MI	1,400	1,640	1,310	140	230	170
MN	1,900	1,720	1,570	179	163	165
NE	2,050	2,200	2,000	199	365	252
NY	1,270	1,580	1,350	203	387	209
WA			2,110			19
Total	1,621	1,862	1,601	1,039	1,618	1,153
Dark Red Kidney						
CA	1,640	1,800	1,090	82	90	60
ID	2,400	2,200	2,220	12	11	20
MI	1,110	1,040	1,000	100	120	90
MN	1,750	1,600	1,410	630	543	450
NY	1,270	1,650	1,600	38	33	32
ND	1,670	1,500	1,690	50	24	88
WI	1,800	1,800	1,600	162	171	115
Total	1,640	1,548	1,383	1,074	992	855
Pink						
CA	1,560	1,550	1,270	125	62	70
ID	2,260	2,290	2,170	167	325	373
MN	1,400	1,650	1,210	66	124	125
NM	2,670			8		
ND	1,370	1,360	1,500	96	95	189
WA	2,130	2,510	2,500	66	93	150
Total	1,731	1,920	1,758	528	699	907

**Dry Edible Beans: Area Planted and Harvested by Commercial
Class, State, and Total, 1996-98**

Class and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Small Red						
ID	12.7	20.5	13.1	12.5	20.1	12.8
MI	3.0	10.0	11.0	3.0	9.0	11.0
WA	5.0	12.0	8.0	4.7	12.0	8.0
Total	20.7	42.5	32.1	20.2	41.1	31.8
Cranberry						
CA	3.0	4.0	2.5	3.0	4.0	2.5
ID	1.4	1.6	0.9	1.3	1.5	0.9
MI	27.0	32.0	27.0	25.0	31.0	26.0
MN	2.0	4.0	3.0	1.9	3.5	2.7
Total	33.4	41.6	33.4	31.2	40.0	32.1
Black						
CA	1.0		2.5	1.0		2.5
CO		2.0	0.7		1.6	0.5
ID	1.1	2.3	5.0	1.0	2.3	4.9
MI	60.0	80.0	135.0	57.0	78.0	134.0
MN	3.0	7.0	15.0	2.7	6.0	12.6
NE	1.0	3.0	3.0	0.9	2.9	2.8
NY	7.0	13.0	10.5	7.0	13.0	10.0
ND	15.0	27.0	63.0	15.0	25.5	60.0
WA			2.2			2.2
WY			3.0			2.8
Total	88.1	134.3	239.9	84.6	129.3	232.3
Blackeye						
CA	24.0	30.0	33.0	23.0	29.0	31.0
TX	8.2	12.0	5.5	6.2	11.2	4.9
Total	32.2	42.0	38.5	29.2	40.2	35.9
Garbanzo						
CA	25.0	9.0	5.0	23.0	9.0	5.0
ID	6.1	7.1	10.6	5.5	6.9	10.3
OR	3.0	3.3	3.9	2.8	3.2	3.9
WA	8.6	4.9	5.0	8.1	4.9	5.0
Total	42.7	24.3	24.5	39.4	24.0	24.2
Other						
CA	7.0	6.0	7.5	7.0	6.0	7.5
CO	0.3	1.3	6.5	0.3	1.2	6.3
ID	0.7	0.9	0.6	0.7	0.9	0.6
KS	1.9	2.6	1.5	1.3	2.3	1.3
MI	8.0	7.0	8.0	8.0	6.5	8.0
MN	5.0	6.0	5.5	4.6	5.0	4.8
MT			0.4			0.2
NE	1.0	1.0	1.0	0.9	0.9	0.9
NM			3.0			3.0
NY	3.0	4.0	2.5	3.0	4.0	2.5
ND	7.0	8.2	8.5	7.0	7.9	8.2
OR	1.7	2.2	1.9	1.7	2.2	1.8
TX	3.8	1.5	9.0	2.9	1.4	8.1
WA	1.9	3.9	0.9	1.9	3.9	0.9
WY	1.0	1.0	2.0	0.9	0.9	1.7
Total	42.3	45.6	58.8	40.2	43.1	55.8

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Dry Edible Beans: Yield and Production by Commercial Class, State, and Total, 1996-98 (continued)

Class and State	Yield per Acre			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Small Red						
ID	2,100	2,300	2,150	263	462	275
MI	1,170	1,670	1,820	35	150	200
WA	2,280	2,330	2,310	107	280	185
Total	2,005	2,170	2,075	405	892	660
Cranberry						
CA	1,500	1,750	1,600	45	70	40
ID	1,850	1,530	2,000	24	23	18
MI	1,600	1,680	1,100	400	520	285
MN	1,790	1,340	1,630	34	47	44
Total	1,612	1,650	1,206	503	660	387
Black						
CA	1,700		1,600	17		40
CO		500	1,800		8	9
ID	2,100	2,170	2,180	21	50	107
MI	1,650	1,790	1,570	940	1,400	2,100
MN	1,520	1,420	1,370	41	85	172
NE	2,000	1,590	2,000	18	46	56
NY	1,430	1,530	1,470	100	199	147
ND	1,420	1,310	1,360	213	334	816
WA			2,500			55
WY			2,390			67
Total	1,596	1,641	1,536	1,350	2,122	3,569
Blackeye						
CA	2,220	2,400	2,180	511	695	677
TX	900	1,000	1,690	56	112	83
Total	1,942	2,007	2,117	567	807	760
Garbanzo						
CA	1,530	1,670	1,700	352	150	85
ID	670	1,580	1,320	37	109	136
OR	1,210	1,750	1,510	34	56	59
WA	1,000	1,570	1,180	81	77	59
Total	1,279	1,633	1,401	504	392	339
Other						
CA	1,360	1,920	2,000	95	115	150
CO	1,000	2,080	950	3	25	60
ID	2,000	2,110	2,170	14	19	13
KS	1,460	1,870	2,000	19	43	26
MI	1,310	1,400	1,340	105	91	107
MN	1,390	1,500	1,210	64	75	58
MT			1,000			2
NE	1,780	2,000	1,670	16	18	15
NM			1,300			39
NY	1,200	1,500	1,520	36	60	38
ND	1,400	1,000	1,290	98	79	106
OR	1,880	2,140	1,940	32	47	35
TX	690	1,000	600	20	14	49
WA	2,470	2,230	2,220	47	87	20
WY	2,560	1,890	2,120	23	17	36
Total	1,423	1,601	1,351	572	690	754

**Lentils: Area Planted, Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
ID	56.0	67.0	58.0	55.0	66.0	56.0
WA	63.0	83.0	62.0	62.0	82.0	62.0
Oth Sts ¹	28.2	43.0	42.0	23.0	35.0	40.5
US	147.2	193.0	162.0	140.0	183.0	158.5
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
ID	800	1,400	1,150	440	924	644
WA	1,100	1,360	1,350	682	1,115	837
Oth Sts ¹	920	1,050	1,130	211	367	457
US	952	1,315	1,223	1,333	2,406	1,938

¹ Includes MT and ND.

**Wrinkled Seed Peas: Production by State
and United States, 1996-98**

State	Production		
	1996	1997	1998
	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
ID	316	286	248
WA	232	396	426
US	548	682	674

**Dry Edible Peas: Area Planted, Harvested, Yield, and Production
by State and United States, 1996-98¹**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
ID	61.0	75.0	69.0	59.0	74.0	67.0
WA	109.0	126.0	108.0	108.0	126.0	108.0
Oth Sts ²	45.9	102.6	146.4	37.9	81.6	134.1
US	215.9	303.6	323.4	204.9	281.6	309.1
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
ID	1,000	2,100	1,700	590	1,554	1,139
WA	1,300	2,080	2,170	1,404	2,621	2,344
Oth Sts ²	1,790	1,930	1,830	677	1,577	2,451
US	1,304	2,043	1,920	2,671	5,752	5,934

¹ Excludes both wrinkled seed peas and Austrian winter peas.

² Includes MT, NV, ND, and OR.

**Austrian Winter Peas: Area Planted, Harvested, Yield,
and Production by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
ID	8.0	7.5	8.0	7.0	7.2	7.0
OR	0.6	1.2	1.0	0.3	0.4	0.4
US	8.6	8.7	9.0	7.3	7.6	7.4
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
ID	1,400	1,500	1,400	98	108	98
OR	1,670	1,750	1,500	5	7	6
US	1,411	1,513	1,405	103	115	104

**Potatoes: Area Planted and Harvested by State
and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
AL	7.8	6.4	6.2	7.6	6.2	6.0
AZ	9.0	6.5	8.1	9.0	6.5	8.1
CA	43.1	43.7	42.0	43.1	43.7	41.9
CO	88.0	84.8	84.2	87.6	84.5	83.9
DE	5.3	4.8	4.6	5.2	4.7	4.6
FL	46.8	43.5	44.3	44.3	42.1	42.5
ID	415.0	400.0	415.0	413.0	398.0	413.0
IL	6.3	4.8	5.8	6.0	4.6	4.9
IN	5.7	4.9	5.3	5.2	4.5	5.0
IA	1.7	1.5	1.4	1.7	1.5	1.3
ME	78.0	72.0	65.5	77.0	72.0	64.5
MD	2.7	3.4	4.6	2.6	3.4	4.6
MA	2.7	3.0	3.0	2.6	3.0	3.0
MI	52.0	48.0	48.0	46.0	47.5	47.5
MN	85.0	77.0	82.0	82.0	73.0	73.0
MO	8.0	6.6	9.6	7.3	6.0	8.8
MT	10.4	10.4	10.6	10.2	10.4	10.6
NE	18.3	24.2	26.5	17.9	24.0	26.2
NV	8.0	7.0	7.0	7.9	6.9	6.9
NJ	2.6	2.6	2.7	2.5	2.5	2.6
NM	10.6	10.1	10.5	10.3	10.0	9.6
NY	27.0	26.5	27.6	26.5	26.0	27.0
NC	18.7	18.7	19.1	18.2	18.5	18.6
ND	134.0	125.0	126.0	131.0	110.0	122.0
OH	5.2	5.3	5.1	5.1	5.2	4.8
OR	62.0	56.5	59.0	61.0	55.5	58.0
PA	16.5	14.0	14.5	16.0	13.5	14.0
RI	0.8	0.8	0.7	0.8	0.8	0.7
SD	5.0	4.6	5.0	4.8	4.4	4.8
TX	17.3	18.4	19.9	16.0	17.2	18.5
UT	4.3	3.3	2.7	4.2	3.3	2.6
VA	7.0	7.0	7.0	6.5	6.5	6.0
WA	163.0	152.0	165.0	161.0	152.0	165.0
WI	86.0	85.5	84.5	85.0	85.0	83.5
WY	0.9	0.7	0.4	0.8	0.7	0.4
US	1,454.7	1,383.5	1,423.4	1,425.9	1,353.6	1,394.4

**Potatoes: Yield and Production by State
and United States, 1996-98**

State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Cwt</i>	<i>Cwt</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
AL	153	155	130	1,159	962	780
AZ	275	280	282	2,475	1,820	2,284
CA	363	365	327	15,651	15,948	13,703
CO	372	326	336	32,556	27,577	28,230
DE	240	205	220	1,248	964	1,012
FL	217	214	207	9,613	9,030	8,798
ID	346	353	338	142,800	140,314	139,650
IL	275	325	290	1,650	1,495	1,421
IN	260	260	320	1,352	1,170	1,600
IA	205	205	235	349	308	306
ME	275	265	280	21,175	19,080	18,060
MD	215	240	235	559	816	1,081
MA	260	270	220	676	810	660
MI	300	300	310	13,800	14,250	14,725
MN	300	280	290	24,600	20,440	21,170
MO	225	250	215	1,643	1,500	1,892
MT	315	320	300	3,213	3,328	3,180
NE	329	390	373	5,887	9,360	9,781
NV	400	430	395	3,160	2,967	2,726
NJ	265	260	270	663	650	702
NM	385	363	334	3,964	3,627	3,204
NY	280	275	270	7,420	7,150	7,290
NC	183	184	184	3,338	3,407	3,430
ND	220	200	235	28,820	22,000	28,670
OH	250	225	250	1,275	1,170	1,200
OR	494	492	452	30,124	27,319	26,229
PA	260	235	240	4,160	3,173	3,360
RI	240	270	210	192	216	147
SD	280	220	260	1,344	968	1,248
TX	212	262	263	3,385	4,502	4,867
UT	280	290	280	1,176	957	728
VA	225	195	230	1,463	1,268	1,380
WA	590	580	565	94,990	88,160	93,225
WI	390	355	370	33,150	30,175	30,895
WY	280	300	300	224	210	120
US	350	345	343	499,254	467,091	477,754

**Potatoes: Area Planted, Harvested, Yield, and Production
by Seasonal Group, State, and United States, 1996-98**

Seasonal Group and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Winter						
CA	5.7	6.6	7.0	5.7	6.6	7.0
FL	8.8	9.6	8.5	8.8	9.4	8.0
Total	14.5	16.2	15.5	14.5	16.0	15.0
Spring ¹						
AL	2.0	1.7	1.8	1.9	1.6	1.7
AZ	9.0	6.5	8.1	9.0	6.5	8.1
CA	20.1	20.7	18.5	20.1	20.7	18.5
FL	38.0	33.9	35.8	35.5	32.7	34.5
Hastings	28.5	24.9	25.5	27.5	23.9	24.5
Other FL	9.5	9.0	10.3	8.0	8.8	10.0
NC	17.5	17.5	18.0	17.0	17.3	17.5
TX	6.8	9.0	10.8	6.5	8.7	10.3
Total	93.4	89.3	93.0	90.0	87.5	90.6
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Cwt</i>	<i>Cwt</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Winter						
CA	250	235	220	1,425	1,551	1,540
FL	210	200	180	1,848	1,880	1,440
Total	226	214	199	3,273	3,431	2,980
Spring ¹						
AL	160	170	130	304	272	221
AZ	275	280	282	2,475	1,820	2,284
CA	375	390	335	7,538	8,073	6,198
FL	219	219	213	7,765	7,150	7,358
Hastings	230	220	235	6,325	5,258	5,758
Other FL	180	215	160	1,440	1,892	1,600
NC	190	190	190	3,230	3,287	3,325
TX	170	195	170	1,105	1,697	1,751
Total	249	255	233	22,417	22,299	21,137

¹ 1998 revised.

**Potatoes: Area Planted and Harvested by Seasonal Group,
State, and United States, 1996-98**

Seasonal Group and State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
Summer						
AL	5.8	4.7	4.4	5.7	4.6	4.3
CA	5.8	5.9	6.2	5.8	5.9	6.1
CO	10.0	7.8	8.4	9.8	7.6	8.2
DE	5.3	4.8	4.6	5.2	4.7	4.6
IL	6.3	4.8	5.8	6.0	4.6	4.9
IA	1.7	1.5	1.4	1.7	1.5	1.3
MD	2.7	3.4	4.6	2.6	3.4	4.6
MO	8.0	6.6	9.6	7.3	6.0	8.8
NE	5.6	4.2	4.5	5.5	4.1	4.4
NJ	2.6	2.6	2.7	2.5	2.5	2.6
NM	3.9	4.0	4.3	3.9	3.9	3.7
NC	1.2	1.2	1.1	1.2	1.2	1.1
TX	10.5	9.4	9.1	9.5	8.5	8.2
VA	7.0	7.0	7.0	6.5	6.5	6.0
Total	76.4	67.9	73.7	73.2	65.0	68.8
Fall						
CA	11.5	10.5	10.3	11.5	10.5	10.3
CO	78.0	77.0	75.8	77.8	76.9	75.7
ID	415.0	400.0	415.0	413.0	398.0	413.0
10 SW Co	28.0	27.0	28.0	28.0	27.0	28.0
Other ID	387.0	373.0	387.0	385.0	371.0	385.0
IN	5.7	4.9	5.3	5.2	4.5	5.0
ME	78.0	72.0	65.5	77.0	72.0	64.5
MA	2.7	3.0	3.0	2.6	3.0	3.0
MI	52.0	48.0	48.0	46.0	47.5	47.5
MN	85.0	77.0	82.0	82.0	73.0	73.0
MT	10.4	10.4	10.6	10.2	10.4	10.6
NE	12.7	20.0	22.0	12.4	19.9	21.8
NV	8.0	7.0	7.0	7.9	6.9	6.9
NM	6.7	6.1	6.2	6.4	6.1	5.9
NY	27.0	26.5	27.6	26.5	26.0	27.0
ND	134.0	125.0	126.0	131.0	110.0	122.0
OH	5.2	5.3	5.1	5.1	5.2	4.8
OR	62.0	56.5	59.0	61.0	55.5	58.0
Malheur	13.6	11.0	11.5	13.3	10.9	11.4
Other OR	48.4	45.5	47.5	47.7	44.6	46.6
PA	16.5	14.0	14.5	16.0	13.5	14.0
RI	0.8	0.8	0.7	0.8	0.8	0.7
SD	5.0	4.6	5.0	4.8	4.4	4.8
UT	4.3	3.3	2.7	4.2	3.3	2.6
WA	163.0	152.0	165.0	161.0	152.0	165.0
WI	86.0	85.5	84.5	85.0	85.0	83.5
WY	0.9	0.7	0.4	0.8	0.7	0.4
Total	1,270.4	1,210.1	1,241.2	1,248.2	1,185.1	1,220.0
US	1,454.7	1,383.5	1,423.4	1,425.9	1,353.6	1,394.4

**Potatoes: Yield and Production by Seasonal Group,
State, and United States, 1996-98**

Seasonal Group and State	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Cwt</i>	<i>Cwt</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Summer						
AL	150	150	130	855	690	559
CA	360	360	370	2,088	2,124	2,257
CO	345	340	350	3,381	2,584	2,870
DE	240	205	220	1,248	964	1,012
IL	275	325	290	1,650	1,495	1,421
IA	205	205	235	349	308	306
MD	215	240	235	559	816	1,081
MO	225	250	215	1,643	1,500	1,892
NE	270	390	365	1,485	1,599	1,606
NJ	265	260	270	663	650	702
NM	360	320	260	1,404	1,248	962
NC	90	100	95	108	120	105
TX	240	330	380	2,280	2,805	3,116
VA	225	195	230	1,463	1,268	1,380
Total	262	280	280	19,176	18,171	19,269
Fall						
CA	400	400	360	4,600	4,200	3,708
CO	375	325	335	29,175	24,993	25,360
ID	346	353	338	142,800	140,314	139,650
10 SW Co	425	470	450	11,900	12,690	12,600
Other ID	340	344	330	130,900	127,624	127,050
IN	260	260	320	1,352	1,170	1,600
ME	275	265	280	21,175	19,080	18,060
MA	260	270	220	676	810	660
MI	300	300	310	13,800	14,250	14,725
MN	300	280	290	24,600	20,440	21,170
MT	315	320	300	3,213	3,328	3,180
NE	355	390	375	4,402	7,761	8,175
NV	400	430	395	3,160	2,967	2,726
NM	400	390	380	2,560	2,379	2,242
NY	280	275	270	7,420	7,150	7,290
ND	220	200	235	28,820	22,000	28,670
OH	250	225	250	1,275	1,170	1,200
OR	494	492	452	30,124	27,319	26,229
Malheur	400	440	400	5,320	4,796	4,560
Other OR	520	505	465	24,804	22,523	21,669
PA	260	235	240	4,160	3,173	3,360
RI	240	270	210	192	216	147
SD	280	220	260	1,344	968	1,248
UT	280	290	280	1,176	957	728
WA	590	580	565	94,990	88,160	93,225
WI	390	355	370	33,150	30,175	30,895
WY	280	300	300	224	210	120
Total	364	357	356	454,388	423,190	434,368
US	350	345	343	499,254	467,091	477,754

**Sweet Potatoes: Area Planted and Harvested, Yield,
and Production by State and United States, 1996-98**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
AL	4.4	3.9	3.8	4.2	3.6	3.7
CA	9.6	9.7	9.1	9.6	9.7	9.1
GA	1.5	1.0	0.8	1.3	0.8	0.7
LA	22.0	21.0	21.0	21.0	20.0	20.0
MS	8.3	8.6	9.8	8.1	8.4	9.7
NJ	1.3	1.2	1.1	1.2	1.1	1.0
NC	33.0	32.0	33.0	31.0	31.0	32.0
SC	1.5	1.3	1.3	1.3	1.1	1.1
TX	5.9	6.3	6.4	5.5	5.8	6.0
VA	0.6	0.6	0.5	0.5	0.6	0.5
US	88.1	85.6	86.8	83.7	82.1	83.8
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Cwt</i>	<i>Cwt</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
AL	170	150	170	714	540	629
CA	225	205	205	2,160	1,989	1,866
GA	200	150	100	260	120	70
LA	160	170	100	3,360	3,400	2,000
MS	160	130	140	1,296	1,092	1,358
NJ	130	105	105	156	116	105
NC	140	160	170	4,340	4,960	5,440
SC	90	110	90	117	121	99
TX	135	155	35	743	899	210
VA	140	150	220	70	90	110
US	158	162	142	13,216	13,327	11,887

**Tobacco: Area Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Harvested			Yield		
	1996	1997	1998	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
CT	2,260	2,545	2,725	1,679	1,622	1,678
FL	7,500	7,300	6,800	2,680	2,610	2,515
GA	46,000	43,000	42,000	2,470	2,075	2,200
IN	7,600	8,900	8,500	1,970	2,100	2,000
KY	195,700	250,500	231,400	2,021	1,988	1,992
MD	8,000	8,000	6,500	1,250	1,500	1,400
MA	800	1,175	1,165	1,515	1,628	1,514
MO	2,700	3,000	2,800	2,230	2,345	2,250
NC	287,800	321,400	251,600	2,035	2,275	2,253
OH	8,000	11,400	9,800	1,580	1,950	1,830
PA	8,200	8,100	7,800	2,051	2,100	2,015
SC	51,000	54,000	45,000	2,310	2,340	2,150
TN	54,560	59,480	61,420	2,014	1,922	1,921
VA	48,370	53,080	45,600	2,141	2,215	2,163
WV	1,700	1,800	1,700	1,200	1,700	1,400
WI	2,870	2,550	2,100	1,799	2,231	2,014
US	733,060	836,230	726,910	2,072	2,137	2,104
	Production					
	1996		1997		1998	
	<i>1,000 Pounds</i>		<i>1,000 Pounds</i>		<i>1,000 Pounds</i>	
CT		3,795		4,128		4,573
FL		20,100		19,053		17,102
GA		113,620		89,225		92,400
IN		14,972		18,690		17,000
KY		395,542		497,928		460,910
MD		10,000		12,000		9,100
MA		1,212		1,913		1,764
MO		6,021		7,035		6,300
NC		585,542		731,199		566,890
OH		12,640		22,230		17,934
PA		16,817		17,020		15,720
SC		117,810		126,360		96,750
TN		109,888		114,292		117,969
VA		103,543		117,576		98,625
WV		2,040		3,060		2,380
WI		5,162		5,690		4,230
US		1,518,704		1,787,399		1,529,647

**Tobacco: Area Harvested by Class, Type, State,
and United States, 1996-98**

Class and Type	Area Harvested		
	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Class 1, Flue-cured			
Type 11, Old Belts			
NC	76,000	88,000	68,000
VA	37,700	41,000	33,000
US	113,700	129,000	101,000
Type 12, Eastern NC Belt			
NC	167,000	185,000	144,000
Type 13, NC Border & SC Belt			
NC	37,000	40,000	31,000
SC	51,000	54,000	45,000
US	88,000	94,000	76,000
Type 14, GA-FL Belt			
FL	7,500	7,300	6,800
GA	46,000	43,000	42,000
US	53,500	50,300	48,800
Total 11-14	422,200	458,300	369,800
Class 2, Fire-cured			
Type 21, VA Belt			
VA	1,100	1,200	1,500
Type 22, Eastern District			
KY	3,800	3,750	3,800
TN	7,500	7,400	7,300
US	11,300	11,150	11,100
Type 23, Western District			
KY	3,600	3,600	3,700
TN	580	600	580
US	4,180	4,200	4,280
Total 21-23	16,580	16,550	16,880
Class 3, Air-cured			
Class 3A, Light Air-cured			
Type 31, Burley			
IN	7,600	8,900	8,500
KY	185,000	240,000	220,000
MO	2,700	3,000	2,800
NC	7,800	8,400	8,600
OH	8,000	11,400	9,800
TN	46,000	51,000	53,000
VA	9,500	10,800	11,000
WV	1,700	1,800	1,700
US	268,300	335,300	315,400
Type 32, Southern MD Belt			
MD	8,000	8,000	6,500
PA	3,400	3,200	3,300
US	11,400	11,200	9,800
Total 31-32	279,700	346,500	325,200

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**Tobacco: Yield and Production by Class, Type, State,
and United States, 1996-98 (continued)**

Class and Type	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Class 1, Flue-cured						
Type 11, Old Belts						
NC	2,120	2,070	2,300	161,120	182,160	156,400
VA	2,235	2,315	2,245	84,260	94,915	74,085
US	2,158	2,148	2,282	245,380	277,075	230,485
Type 12, Eastern NC Belt						
NC	2,025	2,365	2,300	338,175	437,525	331,200
Type 13, NC Border & SC Belt						
NC	1,980	2,455	2,100	73,260	98,200	65,100
SC	2,310	2,340	2,150	117,810	126,360	96,750
US	2,171	2,389	2,130	191,070	224,560	161,850
Type 14, GA-FL Belt						
FL	2,680	2,610	2,515	20,100	19,053	17,102
GA	2,470	2,075	2,200	113,620	89,225	92,400
US	2,499	2,153	2,244	133,720	108,278	109,502
Total 11-14	2,151	2,285	2,253	908,345	1,047,438	833,037
Class 2, Fire-cured						
Type 21, VA Belt						
VA	1,580	1,640	1,600	1,738	1,968	2,400
Type 22, Eastern District						
KY	2,720	2,560	2,500	10,336	9,600	9,500
TN	2,550	2,480	2,500	19,125	18,352	18,250
US	2,607	2,507	2,500	29,461	27,952	27,750
Type 23, Western District						
KY	3,160	2,970	3,000	11,376	10,692	11,100
TN	2,850	2,750	2,750	1,653	1,650	1,595
US	3,117	2,939	2,966	13,029	12,342	12,695
Total 21-23	2,668	2,554	2,538	44,228	42,262	42,845
Class 3, Air-cured						
Class 3A, Light Air-cured						
Type 31, Burley						
IN	1,970	2,100	2,000	14,972	18,690	17,000
KY	1,980	1,960	1,960	366,300	470,400	431,200
MO	2,230	2,345	2,250	6,021	7,035	6,300
NC	1,665	1,585	1,650	12,987	13,314	14,190
OH	1,580	1,950	1,830	12,640	22,230	17,934
TN	1,915	1,830	1,830	88,090	93,330	96,990
VA	1,835	1,905	2,000	17,433	20,574	22,000
WV	1,200	1,700	1,400	2,040	3,060	2,380
US	1,940	1,934	1,928	520,483	648,633	607,994
Type 32, Southern MD Belt						
MD	1,250	1,500	1,400	10,000	12,000	9,100
PA	1,925	1,950	1,900	6,545	6,240	6,270
US	1,451	1,629	1,568	16,545	18,240	15,370
Total 31-32	1,920	1,925	1,917	537,028	666,873	623,364

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**Tobacco: Area Harvested by Class, Type, State,
and United States, 1996-98**

Class and Type	Area Harvested		
	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Class 3, Air-cured			
Class 3B, Dark			
Air-cured			
Type 35, One Sucker			
Belt			
KY	2,100	2,050	2,500
TN	480	480	540
US	2,580	2,530	3,040
Type 36, Green River			
Belt			
KY	1,200	1,100	1,400
Type 37, VA Sun-cured			
Belt			
VA	70	80	100
Total 35-37	3,850	3,710	4,540
Class 4, Cigar Filler			
Type 41, PA Seedleaf			
PA	4,800	4,900	4,500
Class 5, Cigar Binder			
Class 5A, CT Valley			
Binder			
Type 51, CT Valley			
Broadleaf			
CT	1,220	1,315	1,400
MA	410	725	825
US	1,630	2,040	2,225
Class 5B, WI Binder			
Type 54, Southern WI			
WI	1,900	1,800	1,500
Type 55, Northern WI			
WI	970	750	600
Total 54-55	2,870	2,550	2,100
Total 51-55	4,500	4,590	4,325
Class 6, Cigar Wrapper			
Type 61, CT Valley			
Shade-grown			
CT	1,040	1,230	1,325
MA	390	450	340
US	1,430	1,680	1,665
All Cigar Types			
Total 41-61	10,730	11,170	10,490
All Tobacco	733,060	836,230	726,910

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**Tobacco: Yield and Production by Class, Type, State,
and United States, 1996-98 (continued)**

Class and Type	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Class 3, Air-cured						
Class 3B, Dark						
Air-cured						
Type 35, One Sucker						
Belt						
KY	2,340	2,290	2,300	4,914	4,695	5,750
TN	2,125	2,000	2,100	1,020	960	1,134
US	2,300	2,235	2,264	5,934	5,655	6,884
Type 36, Green River						
Belt						
KY	2,180	2,310	2,400	2,616	2,541	3,360
Type 37, VA Sun-cured						
Belt						
VA	1,600	1,490	1,400	112	119	140
Total 35-37	2,250	2,241	2,287	8,662	8,315	10,384
Class 4, Cigar Filler						
Type 41, PA Seedleaf						
PA	2,140	2,200	2,100	10,272	10,780	9,450
Class 5, Cigar Binder						
Class 5A, CT Valley						
Binder						
Type 51, CT Valley						
Broadleaf						
CT	1,840	1,760	1,790	2,245	2,314	2,506
MA	1,600	1,825	1,590	656	1,323	1,312
US	1,780	1,783	1,716	2,901	3,637	3,818
Class 5B, WI Binder						
Type 54, Southern WI						
WI	1,900	2,330	2,100	3,610	4,194	3,150
Type 55, Northern WI						
WI	1,600	1,995	1,800	1,552	1,496	1,080
Total 54-55	1,799	2,231	2,014	5,162	5,690	4,230
Total 51-55	1,792	2,032	1,861	8,063	9,327	8,048
Class 6, Cigar Wrapper						
Type 61, CT Valley						
Shade-grown						
CT	1,490	1,475	1,560	1,550	1,814	2,067
MA	1,425	1,310	1,330	556	590	452
US	1,473	1,431	1,513	2,106	2,404	2,519
All Cigar Types						
Total 41-61	1,905	2,015	1,908	20,441	22,511	20,017
All Tobacco	2,072	2,137	2,104	1,518,704	1,787,399	1,529,647

**Sugarbeets: Area Planted, Harvested, Yield, and Production
by State and United States, 1996-98¹**

State	Area Planted			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>					
CA	84.0	101.0	102.0	82.0	99.0	100.0
CO	54.8	67.9	62.5	51.1	66.4	57.3
ID	187.0	198.0	204.0	184.0	197.0	203.0
MI	153.0	163.0	177.0	130.0	160.0	173.0
MN	441.0	453.0	473.0	438.0	446.0	458.0
MT	57.7	59.9	64.0	57.5	58.3	62.4
NE	55.8	67.3	53.8	51.2	60.3	47.4
NM	1.1	1.6		0.9	1.6	
ND	226.6	231.4	250.0	225.3	227.5	242.6
OH	4.9	0.9	1.3	4.6	0.9	1.1
OR	17.4	17.6	17.6	16.3	17.4	17.5
TX	14.1	16.4		12.6	15.0	
WA	13.0	18.3	36.7	13.0	18.0	36.0
WY	58.0	63.0	56.0	56.8	60.9	53.3
US	1,368.4	1,459.3	1,497.9	1,323.3	1,428.3	1,451.6
	Yield			Production		
	1996	1997	1998	1996	1997	1998
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
CA	29.5	30.0	29.0	2,419	2,970	2,900
CO	20.2	19.7	22.7	1,032	1,308	1,301
ID	24.8	26.4	27.1	4,563	5,210	5,501
MI	15.1	19.0	16.0	1,963	3,040	2,768
MN	18.2	18.5	21.2	7,971	8,251	9,710
MT	22.6	21.0	22.6	1,300	1,224	1,410
NE	17.8	16.8	19.7	913	1,013	934
NM	29.8	30.6		27	49	
ND	18.7	18.5	22.2	4,213	4,205	5,386
OH	18.8	19.0	17.3	86	17	19
OR	25.5	28.4	25.0	416	494	438
TX	19.2	18.0		242	270	
WA	35.5	33.1	33.5	461	595	1,206
WY	18.9	20.4	20.4	1,074	1,240	1,087
US	20.2	20.9	22.5	26,680	29,886	32,660

¹ Related to year of intended harvest except for overwintered spring planted beets in CA.

**Sugarcane: Area Harvested, Yield, and Production
by State and United States, 1996-98**

State	Area Harvested			Yield ¹		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
For Sugar						
FL	417.0	421.0	429.0	33.1	36.9	38.7
HI	42.9	32.0	31.8	82.6	91.4	85.5
LA	335.0	380.0	400.0	27.9	28.2	29.0
TX	34.6	27.3	32.0	28.7	30.3	30.0
US	829.5	860.3	892.8	33.4	34.9	35.7
For Seed						
FL	21.0	19.0	19.0	33.1	36.9	38.8
HI	3.1	2.2	2.2	30.6	38.2	31.4
LA	35.0	30.0	35.0	27.9	28.2	29.0
TX	0.3	2.5	0.5	33.3	30.0	30.0
US	59.4	53.7	56.7	29.9	31.8	32.4
For Sugar and Seed						
FL	438.0	440.0	448.0	33.1	36.9	38.7
HI	46.0	34.2	34.0	79.1	88.0	82.0
LA	370.0	410.0	435.0	27.9	28.2	29.0
TX	34.9	29.8	32.5	28.7	30.3	30.0
US	888.9	914.0	949.5	33.1	34.7	35.5
	Production ¹					
	1996	1997	1998			
	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>			
For Sugar						
FL		13,803		15,535		16,602
HI		3,544		2,925		2,719
LA		9,347		10,716		11,600
TX		993		827		960
US		27,687		30,003		31,881
For Seed						
FL		695		701		737
HI		95		84		69
LA		977		846		1,015
TX		10		75		15
US		1,777		1,706		1,836
For Sugar and Seed						
FL		14,498		16,236		17,339
HI		3,639		3,009		2,788
LA		10,324		11,562		12,615
TX		1,003		902		975
US		29,464		31,709		33,717

¹ Net tons.

**Mint Oil: Area Harvested, Yield and Production
by Crop, State, and United States, 1996-98**

Crop and State	Area Harvested			Yield		
	1996	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Peppermint						
ID	22.0	24.0	21.0	88	90	95
IN	22.0	25.0	23.0	27	42	48
OR	50.0	48.0	42.0	73	73	79
WA	31.0	31.0	30.0	97	95	97
WI	7.0	7.6	8.0	37	41	50
US	132.0	135.6	124.0	72	74	78
Spearmint						
ID	1.4	1.7	2.0	100	100	103
IN	2.2	2.5	2.5	28	37	44
MI	1.3	1.5	1.7	21	34	42
OR	1.6	1.9	1.9	87	83	115
WA	12.0	13.1	14.0	134	136	153
WI	4.6	4.8	5.3	42	39	45
US	23.1	25.5	27.4	94	96	109
	Production					
	1996		1997		1998	
	<i>1,000 Pounds</i>		<i>1,000 Pounds</i>		<i>1,000 Pounds</i>	
Peppermint						
ID		1,936		2,160		1,995
IN		594		1,050		1,104
OR		3,650		3,504		3,318
WA		3,007		2,945		2,910
WI		259		312		400
US		9,446		9,971		9,727
Spearmint						
ID		140		170		206
IN		62		93		110
MI		27		51		71
OR		139		158		219
WA		1,606		1,782		2,142
WI		193		187		239
US		2,167		2,441		2,987

**Hops: Area Harvested and Yield by Variety,
State, and United States, 1996-98**

State and Variety	Area Harvested			Yield		
	1996	1997	1998	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
ID						
Banner	77	73	-	1,700	1,896	-
Chinook	343	342	384	1,666	1,789	1,322
Cluster	815	797	657	2,012	1,966	1,349
Galena	649	666	733	1,653	1,577	1,222
Mt. Hood	20	10	10	1,610	1,750	1,500
Nugget	37	65	97	738	1,112	1,360
Willamette	190	211	225	736	713	714
Other Varieties	1,866	1,706	1,803	1,062	1,100	1,072
Total	3,997	3,870	3,909	1,400	1,417	1,159
OR						
Fuggle	481	423	189	1,430	925	1,093
Golding	*	245	235	*	940	846
Mt. Hood	238	238	225	1,690	1,645	1,510
Nugget	3,101	3,063	2,415	1,665	2,145	2,019
Perle	181	329	385	1,770	1,405	1,306
Tettnanger	796	649	154	1,060	890	1,177
Willamette	3,259	3,070	2,290	1,152	1,467	1,517
Other Varieties	430	335	268	1,305	1,325	1,678
Total	8,486	8,352	6,161	1,383	1,625	1,660
WA						
Cascade	1,045	1,037	992	2,020	1,960	1,800
Chinook	2,234	1,692	1,007	1,900	1,820	1,560
Cluster	4,853	3,625	2,605	1,870	1,880	1,910
Columbus/Tomahawk	-	*	3,999	-	*	2,490
Eroica	183	*	*	2,080	*	*
Galena	7,984	6,960	5,779	2,060	1,830	1,700
Golding	87	161	83	1,090	1,370	1,080
Horizon	-	-	130	-	-	750
Liberty	94	*	*	1,000	*	*
Mt. Hood	955	540	361	1,340	1,320	1,030
Nugget	5,539	5,492	4,793	1,860	2,050	1,510
Olympic	126	126	126	1,970	1,980	1,650
Perle	233	256	296	1,260	1,290	630
Tettnanger	1,991	1,564	252	1,170	1,230	900
Willamette	3,520	4,297	3,922	1,320	1,510	1,180
Other Varieties	2,834	5,330	2,228	2,150	1,870	1,630
Total	31,678	31,080	26,573	1,820	1,796	1,686
US	44,161	43,302	36,643	1,698	1,729	1,625

* Included in other varieties to avoid disclosure of individual operations.

- Unknown or none.

**Hops: Production by Variety, State,
and United States, 1996-98**

State and Variety	Production		
	1996	1997	1998
	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
ID			
Banner	130.9	138.4	-
Chinook	571.5	612.0	507.6
Cluster	1,639.8	1,566.9	886.3
Galena	1,072.8	1,050.0	895.7
Mt. Hood	32.2	17.5	15.0
Nugget	27.3	72.3	131.9
Willamette	139.8	150.4	160.7
Other Varieties	1,981.7	1,876.6	1,932.2
Total	5,596.0	5,484.1	4,529.4
OR			
Fuggle	687.8	391.3	206.6
Golding	*	230.3	198.9
Mt. Hood	402.2	391.5	339.7
Nugget	5,163.2	6,570.1	4,875.2
Perle	320.4	462.2	502.8
Tettnanger	843.8	577.6	181.3
Willamette	3,755.9	4,505.1	3,473.2
Other Varieties	561.2	443.9	449.7
Total	11,734.5	13,572.0	10,227.4
WA			
Cascade	2,110.9	2,032.5	1,785.6
Chinook	4,244.6	3,079.4	1,570.9
Cluster	9,075.1	6,815.0	4,975.6
Columbus/Tomahawk	-	*	9,956.5
Eroica	380.6	*	*
Galena	16,447.0	12,736.8	9,824.3
Golding	94.8	220.6	89.6
Horizon	-	-	97.5
Liberty	94.0	*	*
Mt. Hood	1,279.7	712.8	371.8
Nugget	10,302.5	11,258.6	7,237.4
Olympic	248.2	249.5	207.9
Perle	293.6	330.2	186.5
Tettnanger	2,329.5	1,923.7	226.8
Willamette	4,646.4	6,488.5	4,628.0
Other Varieties	6,093.1	9,968.4	3,632.6
Total	57,640.0	55,816.0	44,791.0
US	74,970.5	74,872.1	59,547.8

* Included in other varieties to avoid disclosure of individual operations.

- Unknown or none.

**Maple Syrup: Production by State
and United States, 1996-98**

State	1996	1997	1998
	<i>1,000 Gallons</i>	<i>1,000 Gallons</i>	<i>1,000 Gallons</i>
CT	10	9	9
ME	167	185	170
MA	49	44	47
MI	88	75	55
NH	89	76	67
NY	343	269	231
OH	90	95	78
PA	71	63	72
VT	550	395	360
WI	110	87	70
US	1,567	1,298	1,159

**Coffee: Area Harvested, Yield, and Production,
Hawaii, 1996-98**

State	Area Harvested			Yield			Production ¹		
	1996-97	1997-98	1998-99	1996-97	1997-98	1998-99	1996-97	1997-98	1998-99
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
HI	5,400	5,800	6,100	1,190	1,620	1,480	6,400	9,400	9,000

¹ Parchment basis.

**Taro: Area Harvested, Yield, and Production,
Hawaii, 1996-98 ¹**

State	Area Harvested ¹			Yield			Production		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
HI	530	450	490				5,700	5,500	6,000

¹ Area is total acres in crop, not harvested acreage. Yield is not estimated.

**Ginger Root: Area Harvested, Yield, and Production,
Hawaii, 1996-98**

State	Area Harvested			Yield			Production		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
HI	200	275	360	47,000	44,000	50,000	9,400	12,100	18,000

**Alaska: Area Planted and Harvested, Yield,
and Production, 1996-98**

State	Area Planted for All Purposes			Area Harvested		
	1996	1997	1998	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
Oats	2,300	3,300	3,500	700	1,500	1,500
Barley	7,200	7,200	7,100	6,900	7,000	6,500
All Hay				20,200	22,500	21,500
Potatoes	870	920	920	630	820	820
	Yield			Production		
	1996	1997	1998	1996	1997	1998
Oats, Bu	45.0	43.5	30.0	31,500	65,300	45,000
Barley, "	41.0	23.5	18.9	283,000	164,500	122,900
All Hay, Tons	0.71	1.16	1.08	14,400	26,000	23,200
Potatoes, Cwt	200	205	177	126,000	168,000	145,000

**New Seedings of Alfalfa and Alfalfa mixtures: Area Seeded
by State and United States, 1997-98**

State	Area Seeded	
	1997 <i>1,000 Acres</i>	1998 <i>1,000 Acres</i>
AZ	55	45
AR	4	6
CA	163	183
CO	80	100
CT	1	1
DE	1	1
ID	140	150
IL	75	90
IN	60	40
IA	240	190
KS	150	110
KY	45	30
ME	1	1
MD	6	8
MA	3	1
MI	160	95
MN	300	250
MO	65	40
MT	150	130
NE	225	260
NV	27	28
NH	1	0
NJ	2	2
NM	32	50
NY	128	145
NC	2	1
ND	115	140
OH	130	94
OK	100	55
OR	60	40
PA	140	160
RI	0	0
SD	200	270
TN	12	4
TX	15	20
UT	55	50
VT	11	12
VA	12	9
WA	60	70
WV	6	8
WI	650	600
WY	55	60
US	3,737	3,549

Crop Summary: Area Planted and Harvested, United States, 1997-98
(Domestic Units) ¹

Crop	Area Planted		Area Harvested	
	1997	1998	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>1,000 Acres</i>
Grains & Hay				
Barley	6,706.0	6,340.0	6,198.0	5,867.0
Corn for Grain ²	79,537.0	80,187.0	72,671.0	72,604.0
Corn for Silage			6,054.0	5,919.0
Hay, All			61,084.0	60,016.0
Alfalfa			23,551.0	23,642.0
All Other			37,533.0	36,374.0
Oats	5,068.0	4,902.0	2,813.0	2,765.0
Rice	3,125.0	3,345.0	3,103.0	3,317.0
Rye	1,400.0	1,571.0	316.0	418.0
Sorghum for Grain ²	10,052.0	9,626.0	9,158.0	7,723.0
Sorghum for Silage			412.0	305.0
Wheat, All	70,412.0	65,871.0	62,840.0	59,002.0
Winter	47,985.0	46,449.0	41,340.0	40,126.0
Durum	3,310.0	3,805.0	3,177.0	3,728.0
Other Spring	19,117.0	15,617.0	18,323.0	15,148.0
Oilseeds				
Canola	671.0	1,127.0	631.0	1,092.0
Cottonseed				
Flaxseed	151.0	336.0	146.0	329.0
Mustard Seed	76.3	98.9	74.7	95.6
Peanuts	1,434.0	1,511.0	1,413.8	1,465.5
Rapeseed	1.6	4.8	1.4	4.7
Safflower	228.0	303.0	215.0	285.0
Soybeans for Beans	70,005.0	72,375.0	69,110.0	70,811.0
Sunflower	2,888.0	3,553.0	2,792.0	3,476.0
Cotton, Tobacco & Sugar Crops				
Cotton, All	13,898.0	13,417.9	13,406.0	10,722.5
Upland	13,648.0	13,088.0	13,157.0	10,486.0
Amer-Pima	250.0	329.9	249.0	236.5
Sugarbeets	1,459.3	1,497.9	1,428.3	1,451.6
Sugarcane			914.0	949.5
Tobacco			836.2	726.9
Dry Beans, Peas & Lentils				
Austrian Winter Peas	8.7	9.0	7.6	7.4
Dry Edible Beans	1,869.8	2,010.1	1,758.8	1,913.9
Dry Edible Peas	303.6	323.4	281.6	309.1
Lentils	193.0	162.0	183.0	158.5
Wrinkled Seed Peas				
Potatoes & Misc.				
Coffee (HI)			5.8	6.1
Ginger Root (HI)			0.3	0.4
Hops			43.3	36.6
Peppermint Oil			135.6	124.0
Potatoes, All	1,383.5	1,423.4	1,353.6	1,394.4
Winter	16.2	15.5	16.0	15.0
Spring	89.3	93.0	87.5	90.6
Summer	67.9	73.7	65.0	68.8
Fall	1,210.1	1,241.2	1,185.1	1,220.0
Spearmint Oil			25.5	27.4
Sweet Potatoes	85.6	86.8	82.1	83.8
Taro (HI) ³			0.5	0.5

¹ Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 1998 crop year. ² Area planted for all purposes. ³ Acreage is total acres in crop, not harvested acreage.

Crop Summary: Yield and Production, United States, 1997-98
(Domestic Units)¹

Crop	Unit	Yield		Production	
		1997	1998	1997	1998
				<i>1,000</i>	<i>1,000</i>
Grains & Hay					
Barley	Bu	58.1	60.1	359,878	352,445
Corn for Grain	"	126.7	134.4	9,206,832	9,761,085
Corn for Silage	Ton	16.1	16.0	97,192	94,525
Hay, All	"	2.50	2.52	152,536	151,338
Alfalfa	"	3.33	3.47	78,535	82,010
All Other	"	1.97	1.91	74,001	69,328
Oats	Bu	59.5	60.4	167,246	167,122
Rice ²	Cwt	5,897	5,669	182,992	188,051
Rye	Bu	25.7	28.2	8,132	11,795
Sorghum for Grain	"	69.2	67.3	633,545	519,933
Sorghum for Silage	Ton	13.1	11.4	5,385	3,487
Wheat, All	Bu	39.5	43.2	2,481,466	2,550,383
Winter	"	44.6	46.9	1,845,528	1,880,605
Durum	"	27.6	37.8	87,783	141,069
Other Spring	"	29.9	34.9	548,155	528,709
Oilseeds					
Canola	Lb	1,237	1,455	780,710	1,588,620
Cottonseed	Ton			6,935	5,182
Flaxseed	Bu	16.6	20.4	2,420	6,708
Mustard Seed	Lb	793	855	59,273	81,750
Peanuts	"	2,503	2,683	3,539,380	3,931,275
Rapeseed	"	1,243	1,353.0	1,740	6,360
Safflower	"	1,822	1,446.0	391,790	412,085
Soybeans for Beans	Bu	38.9	38.9	2,688,750	2,756,794
Sunflower	Lb	1,317	1,509	3,676,952	5,246,701
Cotton, Tobacco & Sugar Crops					
Cotton, All ²	Bale	673	618	18,793.0	13,796.2
Upland ²	"	666	612	18,245.0	13,366.2
Amer-Pima ²	"	1,056	873	548.0	430.0
Sugarbeets	Ton	20.9	22.5	29,886	32,660
Sugarcane	"	34.7	35.5	31,709	33,717
Tobacco	Lb	2,137	2,104	1,787,399	1,529,647
Dry Beans, Peas & Lentils					
Austrian Winter Peas ²	Cwt	1,513	1,405	115	104
Dry Edible Beans ²	"	1,670	1,611	29,370	30,828
Dry Edible Peas ²	"	2,043	1,920	5,752	5,934
Lentils ²	"	1,315	1,223	2,406	1,938
Wrinkled Seed Peas	"			682	674
Potatoes & Misc.					
Coffee (HI)	Lb	1,620	1,480	9,400	9,000
Ginger Root (HI)	"	44,000	50,000	12,100	18,000
Hops	"	1,729	1,625	74,872.1	59,547.8
Peppermint Oil	"	74	78	9,971	9,727
Potatoes, All	Cwt	345	343	467,091	477,754
Winter	"	214	199	3,431	2,980
Spring	"	255	233	22,299	21,137
Summer	"	280	280	18,171	19,269
Fall	"	357	356	423,190	434,368
Spearmint Oil	Lb	96	109	2,441	2,987
Sweet Potatoes	Cwt	162	142	13,327	11,887
Taro (HI) ³	Lb			5,500	6,000

¹ Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 1998 crop year. ² Yield in pounds. ³ Yield is not estimated.

Crop Summary: Area Planted and Harvested, United States, 1997-98
(Metric Units) ¹

Crop	Area Planted		Area Harvested	
	1997	1998	1997	1998
	<i>Hectares</i>	<i>Hectares</i>	<i>Hectares</i>	<i>Hectares</i>
Grains & Hay				
Barley	2,713,850	2,565,730	2,508,270	2,374,320
Corn for Grain ²	32,187,830	32,450,880	29,409,230	29,382,110
Corn for Silage			2,449,990	2,395,360
Hay, All ³			24,720,080	24,287,880
Alfalfa			9,530,850	9,567,680
All Other			15,189,230	14,720,190
Oats	2,050,970	1,983,790	1,138,390	1,118,970
Rice	1,264,660	1,353,690	1,255,750	1,342,360
Rye	566,570	635,770	127,880	169,160
Sorghum for Grain ²	4,067,940	3,895,550	3,706,150	3,125,420
Sorghum for Silage			166,730	123,430
Wheat, All ³	28,495,030	26,657,330	25,430,720	23,877,520
Winter	19,419,050	18,797,450	16,729,880	16,238,590
Durum	1,339,520	1,539,850	1,285,700	1,508,680
Other Spring	7,736,460	6,320,040	7,415,130	6,130,240
Oilseeds				
Canola	271,550	456,090	255,360	441,920
Cottonseed				
Flaxseed	61,110	135,980	59,080	133,140
Mustard Seed	30,880	40,020	30,230	38,690
Peanuts	580,330	611,490	572,150	593,070
Rapeseed	650	1,940	570	1,900
Safflower	92,270	122,620	87,010	115,340
Soybeans for Beans	28,330,320	29,289,440	27,968,130	28,656,500
Sunflower	1,168,740	1,437,860	1,129,890	1,406,700
Cotton, Tobacco & Sugar Crops				
Cotton, All ³	5,624,380	5,430,090	5,425,270	4,339,290
Upland	5,523,210	5,296,580	5,324,510	4,243,580
Amer-Pima	101,170	133,510	100,770	95,710
Sugarbeets	590,560	606,190	578,020	587,450
Sugarcane			369,890	384,250
Tobacco			338,410	294,170
Dry Beans, Peas & Lentils				
Austrian Winter Peas	3,520	3,640	3,080	2,990
Dry Edible Beans	756,690	813,470	711,770	774,540
Dry Edible Peas	122,860	130,880	113,960	125,090
Lentils	78,110	65,560	74,060	64,140
Wrinkled Seed Peas				
Potatoes & Misc.				
Coffee (HI)			2,350	2,470
Ginger Root (HI)			110	150
Hops			17,520	14,830
Peppermint Oil			54,880	50,180
Potatoes, All ³	559,890	576,040	547,790	564,300
Winter	6,560	6,270	6,480	6,070
Spring	36,140	37,640	35,410	36,660
Summer	27,480	29,830	26,300	27,840
Fall	489,720	502,300	479,600	493,720
Spearmint Oil			10,320	11,090
Sweet Potatoes	34,640	35,130	33,230	33,910
Taro (HI) ⁴			180	200

¹ Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 1998 crop year. ² Area planted for all purposes. ³ Total may not add due to rounding. ⁴ Area is total hectares in crop, not harvested hectares.

Crop Summary: Yield and Production, United States, 1997-98
(Metric Units)¹

Crop	Yield		Production	
	1997	1998	1997	1998
	<i>Metric Tons</i>	<i>Metric Tons</i>	<i>Metric Tons</i>	<i>Metric Tons</i>
Grains & Hay				
Barley	3.12	3.23	7,835,420	7,673,580
Corn for Grain	7.95	8.44	233,864,300	247,942,980
Corn for Silage	35.99	35.80	88,171,100	85,751,640
Hay, All ²	5.60	5.65	138,378,330	137,291,520
Alfalfa	7.48	7.78	71,245,750	74,398,220
All Other	4.42	4.27	67,132,580	62,893,300
Oats	2.13	2.17	2,427,570	2,425,770
Rice	6.61	6.35	8,300,380	8,529,850
Rye	1.62	1.77	206,560	299,610
Sorghum for Grain	4.34	4.23	16,092,780	13,206,910
Sorghum for Silage	29.30	25.63	4,885,190	3,163,350
Wheat, All ²	2.66	2.91	67,534,440	69,410,050
Winter	3.00	3.15	50,227,040	51,181,680
Durum	1.86	2.54	2,389,060	3,839,270
Other Spring	2.01	2.35	14,918,330	14,389,100
Oilseeds				
Canola	1.39	1.63	354,120	720,590
Cottonseed			6,290,960	4,700,670
Flaxseed	1.04	0.05	61,470	170,390
Mustard Seed	0.89	0.96	26,890	37,080
Peanuts	2.81	3.01	1,605,440	1,783,200
Rapeseed	1.39	1.52	790	2,880
Safflower	2.04	1.62	177,710	186,920
Soybeans for Beans	2.62	2.62	73,175,780	75,027,640
Sunflower	1.48	1.69	1,667,840	2,379,860
Cotton, Tobacco & Sugar Crops				
Cotton, All ²	0.75	0.69	4,091,690	3,003,770
Upland	0.75	0.69	3,972,380	2,910,150
Amer-Pima	1.18	0.98	119,310	93,620
Sugarbeets	46.91	50.44	27,112,120	29,628,650
Sugarcane	77.77	79.60	28,765,920	30,587,550
Tobacco	2.40	2.36	810,750	693,840
Dry Beans, Peas & Lentils				
Austrian Winter Peas	1.70	1.58	5,220	4,720
Dry Edible Beans	1.87	1.81	1,332,200	1,398,330
Dry Edible Peas	2.29	2.15	260,910	269,160
Lentils	1.47	1.37	109,130	87,910
Wrinkled Seed Peas			30,940	30,570
Potatoes & Misc.				
Coffee (HI)	1.82	1.65	4,260	4,080
Ginger Root (HI)	49.32	56.04	5,490	8,160
Hops	1.94	1.82	33,960	27,010
Peppermint Oil	0.08	0.09	4,520	4,410
Potatoes, All ²	38.68	38.40	21,186,890	21,670,560
Winter	24.03	22.27	155,630	135,170
Spring	28.56	26.15	1,011,470	958,760
Summer	31.33	31.39	824,220	874,030
Fall	40.02	39.91	19,195,580	19,702,600
Spearmint Oil	0.11	0.12	1,110	1,350
Sweet Potatoes	18.19	15.90	604,500	539,190
Taro (HI) ³			2,490	2,720

¹ Data are the latest estimates available, either from the current report or from previous reports. Current year estimates are for the full 1998 crop year. ² Production may not add due to rounding. ³ Yield is not estimated.

**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98**

Year	Corn			
	All Corn	Corn for Grain		
	Area Planted	Area Harvested	Yield per Acre	Production
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>
1989	72,322	64,783	116.3	7,531,953
1990	74,166	66,952	118.5	7,934,028
1991	75,957	68,822	108.6	7,474,765
1992	79,311	72,077	131.5	9,476,698
1993	73,239	62,933	100.7	6,337,730
1994	78,921	72,514	138.6	10,050,520
1995	71,479	65,210	113.5	7,400,051
1996	79,229	72,644	127.1	9,232,557
1997	79,537	72,671	126.7	9,206,832
1998	80,187	72,604	134.4	9,761,085
	Corn for Silage			
	Area Harvested	Yield per Acre		Production
	<i>1,000 Acres</i>	<i>Tons</i>		<i>1,000 Tons</i>
1989	6,606	13.0		86,111
1990	6,123	14.2		86,820
1991	6,140	13.2		81,216
1992	6,069	14.4		87,663
1993	6,823	11.9		81,131
1994	5,717	15.8		90,170
1995	5,321	14.7		78,181
1996	5,607	15.4		86,581
1997	6,054	16.1		97,192
1998	5,919	16.0		94,525

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Sorghum			
	All Sorghum	Sorghum for Grain		
	Area Planted	Area Harvested	Yield per Acre	Production
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>
1989	12,642	11,103	55.4	615,420
1990	10,535	9,089	63.1	573,303
1991	11,064	9,870	59.3	584,860
1992	13,177	12,050	72.6	875,022
1993	9,882	8,916	59.9	534,172
1994	9,787	8,882	72.7	645,741
1995	9,429	8,253	55.6	458,648
1996	13,097	11,811	67.3	795,274
1997	10,052	9,158	69.2	633,545
1998	9,626	7,723	67.3	519,933
	Sorghum for Silage			
	Area Harvested	Yield per Acre		Production
	<i>1,000 Acres</i>	<i>Tons</i>		<i>1,000 Tons</i>
1989	541	10.4		5,647
1990	527	10.2		5,377
1991	483	10.0		4,846
1992	453	12.1		5,468
1993	351	11.2		3,914
1994	362	11.9		4,316
1995	413	10.3		4,242
1996	423	11.8		4,976
1997	412	13.1		5,385
1998	305	11.4		3,487

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
Oats				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>
1989	12,085	6,882	54.3	373,587
1990	10,423	5,947	60.1	357,654
1991	8,653	4,816	50.6	243,851
1992	7,943	4,496	65.4	294,229
1993	7,937	3,803	54.4	206,731
1994	6,637	4,008	57.1	228,844
1995	6,225	2,952	54.6	161,094
1996	4,638	2,655	57.7	153,245
1997	5,068	2,813	59.5	167,246
1998	4,902	2,765	60.4	167,122
Barley				
1989	9,125	8,313	48.6	404,203
1990	8,221	7,529	56.1	422,196
1991	8,941	8,413	55.2	464,326
1992	7,762	7,285	62.5	455,090
1993	7,786	6,753	58.9	398,041
1994	7,159	6,667	56.2	374,862
1995	6,689	6,279	57.2	359,376
1996	7,094	6,707	58.5	392,433
1997	6,706	6,198	58.1	359,878
1998	6,340	5,867	60.1	352,445
Rye				
1989	2,014	484	28.2	13,647
1990	1,625	375	27.1	10,176
1991	1,671	395	24.6	9,734
1992	1,542	391	29.3	11,440
1993	1,493	381	27.1	10,340
1994	1,613	407	27.9	11,341
1995	1,602	385	26.1	10,064
1996	1,457	345	25.9	8,936
1997	1,400	316	25.7	8,132
1998	1,571	418	28.2	11,795

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
All Wheat				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>
1989	76,615	62,189	32.7	2,036,618
1990	77,041	69,103	39.5	2,729,778
1991	69,881	57,803	34.3	1,980,139
1992	72,219	62,761	39.3	2,466,798
1993	72,168	62,712	38.2	2,396,440
1994	70,349	61,770	37.6	2,320,981
1995	69,031	60,955	35.8	2,182,708
1996	75,105	62,819	36.3	2,277,388
1997	70,412	62,840	39.5	2,481,466
1998	65,871	59,002	43.2	2,550,383
Winter Wheat				
1989	55,091	41,509	35.0	1,454,642
1990	56,748	49,721	40.7	2,024,224
1991	51,024	39,506	34.7	1,371,617
1992	50,922	42,123	38.2	1,609,284
1993	51,587	43,811	40.2	1,760,143
1994	49,197	41,355	40.2	1,661,943
1995	48,591	40,987	37.7	1,545,303
1996	51,445	39,574	37.1	1,469,618
1997	47,985	41,340	44.6	1,845,528
1998	46,449	40,126	46.9	1,880,605
Durum Wheat				
1989	3,791	3,673	25.1	92,229
1990	3,570	3,507	34.9	122,430
1991	3,253	3,197	32.5	103,957
1992	2,547	2,519	39.7	99,906
1993	2,241	2,100	33.6	70,476
1994	2,823	2,715	35.6	96,747
1995	3,436	3,356	30.5	102,280
1996	3,630	3,556	32.6	116,090
1997	3,310	3,177	27.6	87,783
1998	3,805	3,728	37.8	141,069
Other Spring Wheat				
1989	17,733	17,007	28.8	489,747
1990	16,723	15,875	36.7	583,124
1991	15,604	15,100	33.4	504,565
1992	18,750	18,119	41.8	757,608
1993	18,340	16,801	33.7	565,821
1994	18,329	17,700	31.8	562,291
1995	17,004	16,612	32.2	535,125
1996	20,030	19,689	35.1	691,680
1997	19,117	18,323	29.9	548,155
1998	15,617	15,148	34.9	528,709

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98**

Year	Rice			
	Area		Yield per Acre	Production
	Planted	Harvested		
<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	
1989	2,731	2,687	5,749	154,487
1990	2,897	2,823	5,529	156,088
1991	2,884	2,781	5,731	159,368
1992	3,176	3,132	5,736	179,658
1993	2,920	2,833	5,510	156,110
1994	3,353	3,316	5,964	197,779
1995	3,121	3,093	5,621	173,871
1996	2,824	2,804	6,120	171,599
1997	3,125	3,103	5,897	182,992
1998	3,345	3,317	5,669	188,051
	Soybeans			
	Area Planted	Harvested for Beans		
		Area	Yield per Acre	Production
<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	
1989	60,820	59,538	32.3	1,923,666
1990	57,795	56,512	34.1	1,925,947
1991	59,180	58,011	34.2	1,986,539
1992	59,180	58,233	37.6	2,190,354
1993	60,085	57,307	32.6	1,869,718
1994	61,620	60,809	41.4	2,514,869
1995	62,495	61,544	35.3	2,174,254
1996	64,195	63,349	37.6	2,380,274
1997	70,005	69,110	38.9	2,688,750
1998	72,375	70,811	38.9	2,756,794
	Flaxseed			
	Area		Yield per Acre	Production
	Planted	Harvested		
<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	
1989	195	163	7.5	1,215
1990	260	253	15.1	3,812
1991	356	342	18.1	6,200
1992	171	165	19.9	3,288
1993	206	191	18.2	3,482
1994	178	171	17.1	2,922
1995	165	147	15.0	2,212
1996	96	92	17.4	1,602
1997	151	146	16.6	2,420
1998	336	329	20.4	6,708

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Peanuts			
	Area Planted	Harvested for Nuts		
		Area	Yield per Acre	Production
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>
1989	1,665.2	1,644.7	2,426	3,989,995
1990	1,846.0	1,815.5	1,985	3,603,650
1991	2,039.2	2,015.7	2,444	4,926,570
1992	1,686.6	1,669.1	2,567	4,284,416
1993	1,733.5	1,689.8	2,008	3,392,415
1994	1,641.0	1,618.5	2,624	4,247,455
1995	1,537.5	1,517.0	2,282	3,461,475
1996	1,401.5	1,380.0	2,653	3,661,205
1997	1,434.0	1,413.8	2,503	3,539,380
1998	1,511.0	1,465.5	2,683	3,931,275
	Sunflower			
	Area		Yield per Acre	Production
	Planted	Harvested		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>
1989	1,840.0	1,786.0	985	1,759,760
1990	1,905.0	1,851.0	1,229	2,274,405
1991	2,746.0	2,673.0	1,352	3,613,030
1992	2,187.0	2,043.0	1,255	2,564,985
1993	2,757.0	2,486.0	1,035	2,572,063
1994	3,567.0	3,430.0	1,410	4,835,825
1995	3,478.0	3,368.0	1,190	4,009,332
1996	2,536.0	2,479.0	1,436	3,559,343
1997	2,888.0	2,792.0	1,317	3,676,952
1998	3,553.0	3,476.0	1,509	5,246,701

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	All Cotton				Cottonseed
	Area		Yield per Acre	Production	
	Planted	Harvested			
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Bales</i>	<i>1,000 Tons</i>
1989	10,586.6	9,537.7	614	12,195.6	4,677.4
1990	12,348.1	11,731.6	634	15,505.4	5,968.5
1991	14,052.1	12,959.5	652	17,614.3	6,925.5
1992	13,240.0	11,123.3	700	16,218.5	6,230.1
1993	13,438.3	12,783.3	606	16,133.6	6,343.2
1994	13,720.1	13,322.3	708	19,662.0	7,603.9
1995	16,931.4	16,006.7	537	17,899.8	6,848.7
1996	14,652.5	12,888.1	705	18,942.0	7,143.5
1997	13,898.0	13,406.0	673	18,793.0	6,934.6
1998	13,417.9	10,722.5	618	13,796.2	5,181.6

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
Canola				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>
1991	155.0	147.0	1,300	191,100
1992	140.0	112.0	1,286	144,037
1993	199.0	187.0	1,350	252,450
1994	354.0	340.0	1,316	447,440
1995	446.0	429.0	1,278	548,447
1996	367.0	347.0	1,385	480,521
1997	671.0	631.0	1,237	780,710
1998	1,127.0	1,092.0	1,455	1,588,620
Mustard Seed				
1991	19.4	18.1	925	16,743
1992	15.3	14.8	980	14,504
1993	18.1	16.4	755	12,382
1994	13.6	13.4	970	12,998
1995	22.9	22.0	832	18,304
1996	19.0	18.6	785	14,601
1997	76.3	74.7	793	59,273
1998	98.9	95.6	855	81,750
Rapeseed				
1991	18.2	15.6	1,035	16,146
1992	12.0	9.8	1,475	14,455
1993	7.2	6.1	1,220	7,442
1994	7.4	6.7	1,880	12,596
1995	2.5	2.4	1,255	3,012
1996	2.5	2.2	1,470	3,234
1997	1.6	1.4	1,243	1,740
1998	4.8	4.7	1,353	6,360
Safflower				
1991	223.0	209.0	1,200	250,800
1992	341.0	307.0	1,325	406,775
1993	404.0	293.0	1,829	535,897
1994	240.0	228.0	1,871	426,588
1995	262.0	252.0	1,755	442,290
1996	222.0	210.0	1,892	397,415
1997	228.0	215.0	1,822	391,790
1998	303.0	285.0	1,446	412,085

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**Crop Summary: Area Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area Harvested	Yield per Acre	Production
	All Hay		
	<i>1,000 Acres</i>	<i>Tons</i>	<i>1,000 Tons</i>
1989	62,722	2.31	144,706
1990	61,030	2.40	146,212
1991	61,834	2.46	152,073
1992	58,903	2.49	146,903
1993	59,689	2.46	146,699
1994	58,815	2.55	150,136
1995	59,764	2.58	154,239
1996	61,169	2.45	149,779
1997	61,084	2.50	152,536
1998	60,016	2.52	151,338
	Alfalfa and Alfalfa Mixtures for Hay		
1989	25,796	2.99	77,059
1990	25,346	3.29	83,413
1991	25,414	3.28	83,319
1992	24,070	3.29	79,140
1993	24,673	3.25	80,115
1994	24,138	3.36	81,130
1995	24,404	3.45	84,138
1996	24,206	3.27	79,139
1997	23,551	3.33	78,535
1998	23,642	3.47	82,010
	All Other Hay		
1989	36,926	1.83	67,647
1990	35,684	1.76	62,799
1991	36,420	1.89	68,754
1992	34,833	1.95	67,763
1993	35,016	1.90	66,584
1994	34,677	1.99	69,006
1995	35,360	1.98	70,101
1996	36,963	1.91	70,640
1997	37,533	1.97	74,001
1998	36,374	1.91	69,328

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
Dry Edible Beans				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Cwt</i>
1989	1,824.6	1,650.9	1,437	23,729
1990	2,177.6	2,084.4	1,553	32,379
1991	1,964.1	1,913.7	1,764	33,765
1992	1,640.6	1,529.9	1,478	22,615
1993	1,867.9	1,618.0	1,351	21,862
1994	2,011.8	1,831.2	1,581	28,950
1995	2,066.3	1,896.3	1,618	30,689
1996	1,839.0	1,750.7	1,594	27,912
1997	1,869.8	1,758.8	1,670	29,370
1998	2,010.1	1,913.9	1,611	30,828
Dry Edible Peas				
1989	175.0	174.0	2,232	3,883
1990	166.0	159.0	1,492	2,372
1991	190.0	187.0	1,987	3,715
1992	159.0	155.0	1,635	2,535
1993	149.0	145.0	2,270	3,292
1994	131.0	128.0	1,762	2,255
1995	210.4	200.9	2,372	4,765
1996	215.9	204.9	1,304	2,671
1997	303.6	281.6	2,043	5,752
1998	323.4	309.1	1,920	5,934
Wrinkled Seed Peas				
1989				1,250
1990				922
1991				925
1992				537
1993				849
1994				754
1995				1,048
1996				548
1997				682
1998				674

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
Austrian Winter Peas				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Cwt</i>
1989	12.2	10.2	1,627	166
1990	13.5	11.5	1,104	127
1991	13.0	11.5	1,209	139
1992	11.2	8.7	1,138	99
1993	13.0	10.5	1,476	155
1994	7.0	4.6	1,109	51
1995	10.9	7.7	1,545	119
1996	8.6	7.3	1,411	103
1997	8.7	7.6	1,513	115
1998	9.0	7.4	1,405	104
Lentils				
1989	94.0	92.0	1,262	1,161
1990	108.0	104.0	841	875
1991	123.0	121.0	1,381	1,671
1992	128.0	126.0	1,243	1,566
1993	145.0	143.0	1,403	2,006
1994	180.0	178.0	1,043	1,856
1995	169.0	163.1	1,364	2,224
1996	147.2	140.0	952	1,333
1997	193.0	183.0	1,315	2,406
1998	162.0	158.5	1,223	1,938

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1993-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
Potatoes				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Cwt</i>	<i>1,000 Cwt</i>
1989	1,305.0	1,281.5	289	370,444
1990	1,399.7	1,370.6	293	402,110
1991	1,407.5	1,374.4	304	417,622
1992	1,339.3	1,315.0	323	425,367
1993	1,389.9	1,321.2	326	430,349
1994	1,421.8	1,385.1	339	469,425
1995	1,400.7	1,376.1	323	445,099
1996	1,454.7	1,425.9	350	499,254
1997	1,383.5	1,353.6	345	467,091
1998	1,423.4	1,394.4	343	477,754
Sweetpotatoes				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Cwt</i>	<i>1,000 Cwt</i>
1989	89.5	86.0	132	11,358
1990	93.9	89.5	141	12,594
1991	81.2	77.8	144	11,203
1992	85.9	82.4	146	12,005
1993	82.9	80.0	138	11,027
1994	86.1	82.7	162	13,380
1995	86.9	83.1	154	12,821
1996	88.1	83.7	158	13,216
1997	85.6	82.1	162	13,327
1998	86.8	83.8	142	11,887
Tobacco				
	Area Harvested		Yield per Acre	Production
	<i>Acres</i>		<i>Pounds</i>	<i>1,000 Pounds</i>
1989	678,200		2,016	1,367,188
1990	733,310		2,218	1,626,380
1991	763,680		2,179	1,664,372
1992	784,440		2,195	1,721,671
1993	746,405		2,161	1,613,319
1994	671,065		2,359	1,582,896
1995	663,525		1,914	1,269,910
1996	733,060		2,072	1,518,704
1997	836,230		2,137	1,787,399
1998	726,910		2,104	1,529,647

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area		Yield per Acre	Production
	Planted	Harvested		
Sugarbeets				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>1,000 Tons</i>
1989	1,324.4	1,294.5	19.4	25,131
1990	1,400.4	1,377.2	20.0	27,513
1991	1,427.4	1,386.7	20.3	28,203
1992	1,436.7	1,411.5	20.6	29,143
1993	1,437.7	1,409.4	18.6	26,249
1994	1,475.8	1,443.0	22.1	31,853
1995	1,444.6	1,420.1	19.8	28,065
1996	1,368.4	1,323.3	20.2	26,680
1997	1,459.3	1,428.3	20.9	29,886
1998	1,497.9	1,451.6	22.5	32,660
Sugarcane				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>1,000 Tons</i>
1989		851.9	34.5	29,426
1990		794.2	35.4	28,136
1991		896.9	33.7	30,252
1992		925.2	32.8	30,363
1993		948.3	32.8	31,072
1994		936.8	33.0	30,927
1995		932.3	33.0	30,779
1996		888.9	33.1	29,464
1997		914.0	34.7	31,709
1998		949.5	35.5	33,717
Maple Syrup				
				<i>1,000 Gallons</i>
1992				1,641
1993				1,007
1994				1,324
1995				1,096
1996				1,567
1997				1,298
1998				1,159

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area Harvested	Yield per Acre	Production
Peppermint Oil			
	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>
1989	100.8	66	6,652
1990	101.8	68	6,953
1991	113.7	58	6,561
1992	111.6	66	7,383
1993	98.3	61	6,027
1994	108.5	69	7,459
1995	135.3	70	9,449
1996	132.0	72	9,446
1997	135.6	74	9,971
1998	124.0	78	9,727
Spearmint Oil			
1989	26.4	70	1,846
1990	33.7	76	2,565
1991	42.4	73	3,108
1992	41.1	89	3,640
1993	32.5	84	2,722
1994	28.4	78	2,213
1995	28.8	79	2,274
1996	23.1	94	2,167
1997	25.5	96	2,441
1998	27.4	109	2,987
Hops			
1989	34.5	1,717	59,326
1990	35.5	1,603	56,855
1991	39.6	1,748	69,155
1992	42.3	1,759	74,337
1993	43.1	1,767	76,144
1994	42.4	1,758	74,560
1995	43.2	1,826	78,852
1996	44.2	1,698	74,971
1997	43.3	1,729	74,872
1998	36.6	1,625	59,548

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**Crop Summary: Area Planted and Harvested, Yield, and Production,
United States, 1989-98 (continued)**

Year	Area Harvested	Yield per Acre	Production
Coffee - Hawaii ¹			
	<i>Acres</i>	<i>Pounds</i>	<i>1,000 Pounds</i>
1989-90	2,300	1,390	3,200
1990-91	2,400	1,170	2,800
1991-92	2,400	1,170	2,800
1992-93	4,000	600	2,400
1993-94	4,200	690	2,900
1994-95	4,400	980	4,300
1995-96	5,500	980	5,400
1996-97	5,400	1,190	6,400
1997-98	5,800	1,620	9,400
1998-99	6,100	1,480	9,000
Taro - Hawaii ²			
1989	430		6,500
1990	420		5,800
1991	550		6,500
1992	550		6,900
1993	510		6,000
1994	490		6,100
1995	550		6,800
1996	530		5,700
1997	450		5,500
1998	490		6,000
Ginger Root - Hawaii			
1989	180	50,000	9,000
1990	190	50,000	9,500
1991	250	48,000	12,000
1992	290	40,000	11,600
1993	360	27,500	9,900
1994	150	40,000	6,000
1995	135	43,000	5,800
1996	200	47,000	9,400
1997	275	44,000	12,100
1998	360	50,000	18,000

¹ Parchment basis.

² Area is total acres in crop, not harvested acreage. Yield is not estimated.

1998 Crop Progress Review

A rainy weather pattern persisted across the eastern half of the United States during April, limiting fieldwork and delaying planting, especially in the Southeast. Cotton growers barely had time between storms to prepare and plant fields, keeping progress well behind normal as the month ended. As the end of the month neared, a dry pattern emerged in the western Corn Belt, allowing planting to rapidly progress. The eastern Corn Belt remained wet through the end of the month, and planting lagged behind normal in Illinois, Indiana, and Ohio. In Minnesota, planting advanced at a record pace. From the Great Lakes westward through the northern Plains and Pacific Northwest, above-normal temperatures and dry weather allowed farmers to rapidly seed small grain crops. By the end of the month, most of the Nation's spring wheat, barley, and oat crops were planted, but dry weather slowed germination and crop growth, especially in the central and northern High Plains. The mild weather coaxed winter wheat out of dormancy earlier than normal and provided good growing conditions for most of the month. Fieldwork and planting were delayed by rain in the Southwest.

As May began, dry weather allowed planting activity to accelerate in the western Corn Belt and central and northern Great Plains. Frequent rains in the eastern Corn Belt limited planting progress until mid-month. As farmers finished planting corn, they immediately began planting soybeans, which also progressed well ahead of the normal pace in the western Corn Belt. Crop emergence and development were aided by above-normal temperatures and timely showers. In the Great Plains, winter wheat developed ahead of normal during the month as above-normal temperatures prevailed. In the southern Great Plains, hot weather quickly ripened the crop, but also caused conditions to steadily decline, especially in Texas. Wheat was also stressed by excessively dry weather in Montana. Unlike in the East, temperatures in the Southwestern States remained below-normal temperatures during most of the month, slowing many field operations. By month's end, most of the cotton was planted in the Southwest, but emergence was slow due to cool soils and crusting that occurred after frequent rains. In the Mississippi Delta and Southeastern States, rains delayed cotton planting until drier weather allowed progress to accelerate near mid-month. The cotton crop was rated mostly good as the month ended, but hot, dry weather in Texas and cool, wet weather in California were detrimental to conditions in those States.

During June, frequent thunderstorms provided above-normal rainfall to most of the Corn Belt, and crops developed well ahead of normal. Some locally heavy downpours flooded low-lying fields and eroded hill sides and waterways. Corn fields in low-lying and poorly drained areas exhibited stunted growth and discoloration due to extended periods of standing water and soggy soils. Several storm cells produced hail and strong winds that caused isolated crop damage across the Corn Belt. Warm weather continued to ripen the winter wheat well ahead of normal in most winter wheat-producing States. Dry weather in the central and southern Plains aided harvest efforts and most winter wheat was combined by the end of the month. In the southern and eastern Corn Belt, harvest began earlier than normal, and progressed ahead of the 5-year average. Hot, dry weather stressed cotton in the Southeast, Mississippi Delta, and southern Plains. Scattered showers and thunderstorms provided temporary relief from dry conditions in some cotton producing areas, but conditions in most fields deteriorated during the month. Below-normal temperatures persisted in the Southwestern States, hindering crop development, especially in California, where cotton development was 1 to 4 weeks behind normal.

Corn and soybean development remained ahead of the 5-year average during July, as seasonal weather prevailed across most of the Corn Belt. Late-month rains relieved dryness in most areas of the eastern Corn Belt, but drought conditions persisted in Michigan. Excessive rainfall caused flooding in the lower Missouri and Ohio Valleys. Crops in the southern Great Plains, lower Mississippi Valley, and Southeast were stressed by excessive heat and dry soils for most of the month. Mid-month thunderstorms temporarily relieved dryness and revitalized crops in some areas of the Mississippi Delta and Southeast. Moderate temperatures in the Pacific Northwest provided ideal growing conditions early in the month. Warm, humid weather quickly ripened small grains and row crops in the northern Great Plains. Harvest of spring wheat and other small grains began early and progressed ahead of normal through the end of the month. Cool weather continued to hinder cotton and rice development in California until mid-month. Warmer weather during the last half of the month accelerated growth, but development remained well behind the 5-year average as the month ended.

Mild temperatures and ample rainfall in early August continued to promote rapid corn and soybean development in most areas of the Corn Belt while temperature and precipitation patterns limited insect populations and disease outbreaks. In areas that had received excessive rainfall, uneven corn growth and

yellowing due to nitrogen deficiency became more evident as the month progressed. Flooding plagued low-lying fields along the lower Ohio River Valley and Missouri Bootheel during the first half of the month while drought continued to stress corn and soybeans in parts of the Great Lakes region. In the southern Great Plains and Southeast, virtually all cotton fields had progressed into the boll setting stage by mid-month and bolls were opening more than 1 week ahead of the average pace. Many areas from the Mississippi Delta through the Southeast battled rising insect populations, worm infestations, and boll rot. Scattered rains throughout the month relieved drought conditions in many areas of the southern Plains, Mississippi Delta, and Southeast, but the relief came too late to help early-maturing crops. Late-planted cotton, peanut, and sorghum fields benefited from the rains, but were still under stress from excessive dryness as the month ended. Along the western Gulf Coast, cotton and rice harvest activity was periodically hindered by rain, but, by the end of the month, harvest was nearly complete for both crops. The winter wheat harvest was nearly complete in the northern Great Plains and Pacific Northwest when month began. Spring wheat and barley harvest accelerated, as scattered early-month rains had little impact on the harvest pace. By mid-month, the spring wheat and barley crops were well over 50 percent harvested, nearly triple the normal pace in Minnesota and North Dakota. The rapid harvest pace continued through the end of the month, with many areas finishing 2 or 3 weeks early. The oat harvest was more than half complete as the month began and continued ahead of normal as the month progressed, finishing well before the end of the month in most areas of the Corn Belt. Above-normal temperatures promoted crop development and improved crop conditions in California, but cotton and rice development continued to lag well behind normal.

Corn development entered September a week or more ahead of normal and progressed rapidly toward maturity due to warm weather. Across the northern Corn Belt, progress was nearly 2 weeks ahead of the normal pace. By the end of the month, nearly a fourth of the crop was harvested. The Nation's soybean crop also quickly ripened due to warm weather. Harvest gained momentum near mid-month and by the end of the month, a third of the crop had been combined. Cotton also matured quickly, with bolls opening on half of the crop as the month began and more than one-fourth was harvested by the end of the month. The rice harvest progressed ahead of average in Texas and the Delta States, but began late and progressed behind the 5-year average in California. Peanut harvest started early in Florida, but slowed after tropical storms hit peanut-producing areas along the Gulf coast. Harvest in Georgia, Alabama, and the Carolinas was hampered by hard, dry soils early in the month, and by heavy rains most of the remainder of the month. Dry weather across the northern Great Plains and Pacific Northwest allowed the harvest of small grains to finish at least 2 weeks early in most areas. Parts of Montana and North Dakota finished nearly 3 weeks early. Early month dry weather also allowed winter wheat seeding to advance, especially in Washington, where more than a third of the crop was seeded early in the month. However, seeding progress generally lagged throughout the month, as growers in the central Great Plains waited for rain to replenish soil moisture.

As October began, dry weather provided excellent harvest conditions in the Corn Belt. Periodic rains during the month, interfered with harvest efforts, but harvest activities resumed in all areas after the brief rain delays and remained well ahead of normal throughout the month. By the end of the month, the harvest season was winding down, more than 1 week early for corn and nearly 1 week early for soybeans. Cotton development began the month 1 week ahead of normal, with virtually all fields in the Mississippi Delta States in the boll opening stage, much of which was harvested. Most of the crop was mature in the southern Plains and Southeast, and continued to rapidly advance in California. Georges' heavy rains and subsequent flooding damaged cotton fields along the eastern Gulf coast and halted harvest activity. Harvest efforts were interrupted by rain in parts of the Mississippi Delta and Atlantic Coastal Plains during the first half of the month. Dry conditions in the central Mississippi Delta region and western Oklahoma aided harvest progress. During the last half of the month, rain delays were mostly limited to the southern Plains. As the month ended, two-thirds of the crop was harvested, ahead of the normal pace, but California producers lagged well behind the 5-year average. Moisture from early-month rains helped germinate winter wheat in the southern Plains, but resulted in planting delays. In the northern Rocky Mountains, Pacific Northwest, and eastern Corn Belt, favorable weather aided seeding efforts. In the southern Corn Belt and northern Delta region, rain curtailed planting until mid-month, when progress gained momentum. Emergence lagged in the central and southern Plains due to the slow planting pace, but rain during the first half of the month boosted emergence in the northern Plains. The rice harvest progressed ahead of normal, except in California, where progress continued to lag behind normal throughout the month. Warm weather early in the month aided sorghum development, allowing the harvest pace to accelerate in the Great Plains and southern Corn Belt. By mid-month, harvest was virtually complete in most areas of the Mississippi Delta States. By the end of the month, growers in the southern Corn Belt and Great Plains were also nearly finished. Peanut harvesting fell behind the normal pace

due to heavy rains and flooding from Hurricane Georges and continued to lag throughout the month in Georgia and Alabama. In the southern Plains and along the Atlantic Coastal Plains, the harvest progressed ahead of normal.

A large mass of cold air descended from Canada in early November and the first major snowstorm followed days later. Harvest activities were halted and wheat fields were blanketed with at least a few inches of snow in the northern Great Plains. The harvest of the Nation's corn and soybean crops was nearing completion as the month began, ahead of normal due to early ripening and good harvest weather. The Corn harvest briefly fell behind normal in parts the central Great Plains near mid-month, but warm, dry weather returned and the harvest pace quickly moved back ahead of the 5-year average. As the month began, planting of the Nation's winter wheat was virtually complete in the northern Plains and Rocky Mountains, while growers in the Southeast and Southwest were just gaining momentum. By mid-month, most planting in the central and southern Great Plains, and eastern Corn Belt was complete. Rain delayed planting efforts in parts of the southern Corn Belt. Dry soils forced growers in the Southeast to delay planting until early-month showers partially relieved topsoil dryness. Emergence also lagged behind normal, partly because of late planting and partly due to dry soils, especially in the Great Plains and Southeast. Warm weather during the last half of the month stimulated growth in the central and southern Great Plains, Corn Belt, and lower Mississippi Valley. Mostly dry conditions allowed cotton growers in the lower Mississippi Valley to complete their harvest by mid-month. Dry weather also aided harvest in the Southeast, but harvest progress lagged in California due to the late-maturing crop. Sorghum harvest progressed slightly ahead of normal until mid-month, when rains slowed progress in the Great Plains and southern Corn Belt. Dry conditions aided progress during the second half of the month, except in the northern Plains, where progress was halted by early-month winter storms. Harvest resumed late in the month as muddy fields slowly dried. The peanut harvest also progressed ahead of normal, as dry weather prevailed in most peanut producing regions. Florida growers finished harvesting far ahead of the 5-year average.

Record high temperatures east of the Rocky Mountains in early December stimulated winter wheat development in parts of the central and southern Plains, Corn Belt, Southeast, and lower Mississippi Delta. Dry conditions assisted late-season harvest efforts and fall tillage operations in most of the Corn Belt, Southeast, and middle Atlantic Coastal Plains. As mid-month approached, temperatures fell to more seasonal levels, ending winter wheat growth in the central and northern Great Plains and Corn Belt. Seeding of small grains and winter forages continued in California, but were hampered by wet soils in many areas. Cool, cloudy weather slowed growth of emerging crops in the San Joaquin Valley, while wheat fields in the Sacramento Valley were growing well with additional moisture. Poor drying conditions hampered cotton harvesting in the Central Valley, and the lint quality declined in unharvested fields. Vegetable harvest activity was slowed by frost, but fruit and nut harvest was active. In Texas, small grain growth was slowed in the Plains by freezing temperatures and snow. Cotton growth ended following a hard freeze and final harvest, temporarily halted by snow, resumed late in the week. Grain sorghum and peanut harvests were nearly complete by mid-month in the Plains. In South Central Texas, the final peanut harvest was hampered by wet fields. Hot, dry weather continued to delay small grain emergence in the Southeast, where soil moisture was becoming increasingly short. However, the dry weather allowed vegetable planting and harvesting activities to proceed on schedule in Florida. Picking quality and color were good and growth of recently planted vegetable crops was normal. Shortly after mid-month, an arctic airmass brought frigid temperatures to the Northwest and northern Rocky Mountains, and the coldest temperatures of the winter to the Great Plains, and the western Corn Belt. Northern Florida experienced below-freezing temperatures, but vegetable and fruit crops in central and southern areas of the state were not affected. In California, growers harvested vegetables in the Imperial and Coastal Valleys, pruned orchards in the Sacramento Valley, and planted winter wheat and oats in the San Joaquin Valley. Mild temperatures aided winter wheat development in the Sacramento Valley and vegetable crops were developing well in the San Joaquin valley. As the end of the month approached, another bitter cold airmass pushed southward out of western Canada into the western and central United States. Several nights of sub-freezing temperatures damaged citrus crops in the Sacramento and San Joaquin Valleys, but southern California citrus escaped major damage. The lemon crop was especially hard hit. Freeze damage to California's vegetable crops was not as severe, but the cold weather halted winter vegetable harvest activities. In Texas, mild temperatures aided winter wheat growth and most fields provided good forage for grazing.

1998 Weather Review

Wet, stormy weather early in the year stretched from California to Florida and the rest of the Southeast, as El Niño-influenced storms battered the West Coast and rode the southern jet stream eastward. An unusually mild winter over most of the country preceded severe spring-summer drought and heat in the South. Heavy rains and numerous severe storms during the spring lashed the Midwest and Northeast, but summer wetness benefited farmers in the Corn Belt. Unusual autumn warmth covered most of the nation as above-normal precipitation soaked central and western areas while dryness intensified in parts of the East. An active Atlantic tropical storm season resulted in seven tropical storms and hurricanes striking the country. In Hawaii, drought that began late in 1997 continued into the spring of 1998. For the year as a whole, the contiguous States were abnormally warm and wet. Nineteen ninety-eight was in a virtual tie with 1934 as the warmest year on record. This was also the fifth wettest year on record, despite the severe springtime drought across the South.

Winter (December 1997- February 1998)

The El Niño contributed to abnormally mild and wet winter weather over much of the country. Storminess was especially pronounced in California and Florida. Precipitation amounts for the 3-month period exceeded 30 inches and 400 percent (%) of normal over western parts of both States. Winter temperatures averaged 5 to 12°F above normal from the North-Central States to the Northeast, helping the nation record its second mildest winter in more than 100 years. The warmth contributed to a dearth of snowfall at low-elevation locations, especially along the East Coast. However, higher elevations in the interior picked up heavy snows from several coastal storms, most notably on January 27-28, when a storm blanketed West Virginia with up to 35 inches. In northern New England and upstate New York, a major ice storm coated surfaces with a 1- to 3-inch layer of glaze during January 5-9, causing extensive damage to trees and powerlines. According to the USDA Forest Service, ice from the unprecedented storm damaged 18 million acres of forestland. During the same period, heavy rains triggered flooding in the Southeast. In California, February storms dumped more than 15 inches of rain in some locations and heavy snows in the Sierra Nevada. Los Angeles' monthly rainfall total of 13.68 inches broke a February record that had stood since 1884. Florida measured its wettest November-March period ever, with El Niño-influenced storms causing tornadoes and flooding. On February 22-23, a low-pressure system triggered Florida's deadliest tornado outbreak on record, leaving 41 people dead.

Spring (March-May)

Spring featured abnormally cool and wet weather over California, Nevada, and Arizona, as well as above-normal precipitation across the Corn Belt and East Coast. Three-month precipitation totals exceeded 200% of normal across most of California, while temperatures lagged the normal by 2 to 4°F or more. Spring also saw the start of severe drought across Texas and Florida, as the winter season rains came to an abrupt halt during March along the Gulf Coast. Hot weather arrived in southern Texas in early May and then spread across the South, intensifying dryness.

Ironically, the coldest weather of the season arrived during the first 2 weeks of March, the start of the meteorological spring. Temperatures averaged 10 to 24°F below normal over the Great Plains and much of the Southeast during the second week of March, setting about 150 daily-record lows. Hastings, NE set a March record with -15°F on the 11th and St. Louis saw its lowest reading of the season on March 12 with 4°F. Snow cover protected winter wheat from significant damage in the hardest-hit areas. Three consecutive freezes (March 11-13) hit peach-growing areas in the Southeast.

In contrast to earlier cold weather, a summer-like warm spell at the end of March produced about 200 daily-record highs and more than 20 March-record highs. Heavy rains (4-12 inches) early in the month caused extensive flooding in parts of Alabama and Georgia. The end of the heavy rains in late March was initially favorable in Florida, allowing floodwaters to subside. April record rains drenched the Ohio Valley and parts of the Southeast. Late April frosts caused spotty damage to fruit-tree blooms and vineyards in the Great Lakes region into the Northeast.

May was a month of contrasts, as record high rainfall covered California, Washington, Oregon, Nevada, and Idaho, while heat and dryness intensified from New Mexico to Florida. A number of Texas cities set or tied

monthly records by collecting no measurable rain during the entire month, including Laredo, Brownsville, and Victoria. Del Rio and Abilene also notched their highest May average temperatures ever. In the Northeast, persistent wetness prevailed early in the month, with Williamsport, PA recording 13 consecutive days of rain from April 30 to May 12.

In Hawaii, El Niño-related drought developed during the autumn of 1997 and continued to at least May of 1998. From January to mid-June, Honolulu measured only 1.76 inches of rain, which was 16% of normal. Rains brought significant improvement after May to some areas, but drought lingered elsewhere through year end.

A number of severe weather outbreaks affected areas east of the Rockies during the spring, including deadly tornado outbreaks in Georgia on March 20, Minnesota on March 29, Alabama and Georgia on April 9, Tennessee and Kentucky on April 16, and South Dakota on May 30. The annual national tally of 129 tornado deaths was well above the long-term average of 77.

Summer (June-August)

Hot, dry weather early in the summer resulted in severe drought across the South, while heavy rains caused flooding in the Midwest and Northeast. Summer temperatures averaged more than 4°F above normal in much of Texas, Oklahoma, and Arkansas, as well as parts of Louisiana and Florida. With high pressure aloft shunting storm systems northward, 3-month rainfall totaled more than 50% above normal over much of the Midwest and parts of New England.

Noteworthy dryness and heat prevailed during June in Texas and Florida, with some of the heat migrating northward and affecting Oklahoma and Kansas by the end of the month. In Florida, Daytona Beach, Melbourne, and Orlando all reported the hottest June on record. Melbourne also set a record for the driest June, with a rainfall total of 0.16 inches (3% of normal). Amarillo, TX tallied just 0.12 inches this month. Regionally, the South tabulated its driest and warmest May-June ever. Tinder dry woodlands encouraged the spread of fires in Florida, where nearly one-half million acres burned from May into July. In contrast, the West reported its wettest May-June on record, and heavy rains caused flooding in the Midwest and New England during June. Warm weather finally arrived in California's Central Valley during July, following a very wet and cool spring. Temperatures rose to 110°F and higher in the Central Valley during early August.

In early June, a cold snap struck the northern Plains while the southern Plains baked under 100-degree heat. Temperatures dipped into the 20's in North Dakota and Minnesota on June 4, and 3 inches of snow fell on Rapid City, SD on June 2-3.

By early July, severe drought covered most of Texas and Florida, southern Georgia, and parts of Alabama, Louisiana, and Arkansas, while moderate drought affected eastern New Mexico and southern Oklahoma. Scattered thunderstorms began easing drought in Florida and elsewhere in the Southeast during July, though drought persisted in the southern Plains. Despite excessive wetness during June in many areas and dryness later in the north, particularly in Michigan, overall summer rainfall and temperature patterns favored crops in the Corn Belt.

Drought gradually developed to the east, as wetness during the first half of the year preceded dryness during the second half of the year over the mid-Atlantic region and parts of the Ohio and Tennessee Valleys.

Tropical storms began relieving dryness across the South in August. Tropical Storm Charley was the first of seven tropical systems to strike the country this year, crossing the Texas coast on August 22. The storm dropped more than 17 inches of rain in the Del Rio area the following day, causing major flooding, but the rains were beneficial for other parts of south Texas. Hurricane Bonnie made landfall in North Carolina on August 26, damaging coastal areas of North Carolina and Virginia, but easing dryness in the interior.

Autumn (September-November)

Autumn featured above-normal temperatures over nearly the entire country, making this the second warmest autumn in more than 100 years. Tropical and extratropical storms brought well above-normal precipitation to the West, Central, and South. Dryness (less than 75% of normal) covered a large part of the East from

Tennessee to New Jersey. July-November precipitation was the lowest since 1930 in Washington, DC and Baltimore, MD. The wetness gradually eliminated drought over most of the southern Plains and Gulf States, but the dry weather and high temperatures intensified drought over the mid-Atlantic and Tennessee Valley regions.

Tropical activity included Hurricane Earl, which hit northwestern Florida on September 3; Tropical Storm Frances, making landfall in Texas on September 11; Hurricane George, which caused extensive damage to Puerto Rico on September 21-22 before crossing the Florida Keys and making landfall in Mississippi on September 27; and Tropical Storm Mitch, which crossed southern Florida on November 4-5.

October was especially wet across the Plains, eliminating rainfall deficits but causing harvest delays and some flooding. Torrential rains triggered major flooding in southeast Texas on October 17-19. On the 17th, San Antonio collected 11.26 inches of rain, the city's wettest day ever. More record rains hit south Texas in mid-November, Victoria measuring 8.44 inches on the 12th to 14th. At month's end, heavy rain in Oklahoma and Kansas left standing water and washed out some low-lying wheat fields. A major winter-type storm crossed the Great Plains on November 10, bringing damaging winds up to 90-mph and over a foot of snow to the northern Plains.

Autumn warmth broke numerous records, as September's heat produced over 400 daily-record highs, and unprecedented warmth from mid-November to early December broke or tied some 700 daily records. Even the north coast of Alaska was unusually mild, the autumn temperature at Barrow averaging 12°F above normal.

A series of Pacific storms began slamming into the Northwest during November, benefiting winter wheat areas in the east but causing wind damage and river flooding in the west. Seattle, WA set a November record with 11.62 inches of rain.

December

Storms continued to plow into Washington and Oregon during December, with one potent system bringing heavy rain and snow on December 28. As the year closed, flooding was still widespread in the Northwest, though water levels were subsiding.

The November "heat wave" continued into the first week of December, but very cold air invaded the country on December 19-21, bringing subzero cold and a blizzard to the Great Plains. Cold air enveloped nearly the entire country, including California, where freezes struck the San Joaquin Valley on December 21-25, damaging citrus and vegetables. Minimum temperatures dropped to near zero during December 20-24 in the Northwest's white winter wheat region, raising concerns about potential damage.

Freezing rain and sleet overspread an extensive area from Texas to Virginia on December 23-24, causing major power outages and traffic delays. Another blast of cold air stretched across the eastern half of the country during the last days of the year. Indianapolis, IN measured its lowest temperature of the year (4°F) on December 31.

Corn for grain: Corn for grain production was estimated at 9.76 billion bushels, up 6 percent from the 1997 crop, but down 1 percent from the November 1 forecast. The 1998 production ranks second behind the 10.1 billion bushels produced in 1994. The U. S. yield of 134.4 bushels per acre was up 7.7 bushels from a year earlier.

Planted area totaled 80.2 million acres, 1 percent more than in 1997 and the largest planted acreage since 1985. An estimated 72.6 million acres were harvested for grain, virtually unchanged from last year. Extended dry weather across the Southeast caused farmers to abandon a much larger amount of acreage than normal.

Corn silage production was estimated at 94.5 million tons, 3 percent less than 1997. Yield was estimated at 16.0 tons per acre, down 0.1 ton from a year ago. Farmers harvested 5.92 million acres for silage, down 2 percent from last year.

Corn planting proceeded rapidly and was 97 percent complete by May 31, 1998, ahead of the average of 88 percent. Favorable conditions prevailed over most of the Corn Belt through the summer months and by the beginning of August, 91 percent of the corn acreage was silking in the 17 major corn-producing States, compared with the average of 73 percent. At that time, the percent of corn rated good to excellent totaled 68 percent, above the 66 percent in 1997. While western and northern states received timely rainfall, an area extending from Texas to Florida received well below the normal precipitation causing the corn fields to mature abnormally or be abandoned.

The Corn Belt remained virtually frost-free through October and dry conditions quickly ripened the crop. Grain moisture levels were low and farmers made rapid harvest progress, especially in the western and northern Corn Belt. As of November 1, 83 percent of the crop was harvested, compared with 68 percent for the average. Freezing temperatures arrived in early November, but fields remained dry and harvest was 97 percent complete by November 22.

The 1997 Corn Objective Yield data indicated record stalk and ear counts for the seven objective yield States (Illinois, Indiana, Iowa, Minnesota, Nebraska, Ohio, and Wisconsin).

Sorghum: Grain production for 1998 was estimated at 520 million bushels, essentially unchanged from the November forecast and 18 percent below the 1997 production. Grain yields, at 67.3 bushels per acre, were up 0.8 bushel from November 1 and 1.9 bushels below the 1997 average. The final estimate of all sorghum planted was 9.6 million acres, down 4 percent from the year earlier and 1 percent below the previous estimate. Area harvested for grain was estimated at 7.7 million acres, down 16 percent from 1997.

Silage production was estimated to total 3.49 million tons, a decrease of 35 percent from 1997. Area cut for silage was 305,000 acres, 26 percent fewer acres than the previous year. Silage yields averaged 11.4 tons per acre, down 1.7 tons from 1997.

Kansas continues to lead in sorghum planted and harvested acres and production for both grain and silage. Drought conditions in Texas lead to farmers planting more acres of sorghum. However, Texas harvested for grain acreage did not show the same increase due to extreme drought conditions. Silage production in Texas was reduced by 36 percent from the previous year.

Oats: Production for the 1998 crop year totaled 167.1 million bushels, 2 percent below the September end-of-season estimate, and slightly below the 1997 production. The 1998 production is the third smallest crop since records were first kept in 1866, exceeding the 1995 production by 4 percent and the 1996 production by 9 percent. The grain yield, at 60.4 bushels per acre, is down 0.1 bushel from the September **Small Grains 1998 Summary** and 0.9 bushel above the 1997 yield. Area harvested for grain in 1998 was 2.77 million acres, 42,000 acres below the previous estimate and 2 percent below 1997 harvested acres. This is the second smallest acreage harvested for grain on record, exceeding only the 1996 harvested acreage of 2.66 million.

Planting moved well ahead of normal as the season progressed due to a fast start in the northern Great Plains and northern and eastern Corn Belt. In the western Corn Belt, wet weather briefly delayed the start of the planting season, but progress quickly moved ahead of normal as a dry weather pattern emerged. Emergence also progressed well ahead of normal, aided by unusually warm spring weather. Hot, dry weather during July and August promoted rapid crop development, but also dimmed yield and grain quality prospects in several Corn Belt and Great Plains States. These factors, combined with grass and hay shortages, encouraged growers to harvest additional oat acres for hay. In Oregon, a record average yield was recorded due to nearly ideal weather conditions. The early ripening of the crop allowed the harvest season to begin early and dry conditions during August allowed the harvest to progress well ahead of normal. By late August, harvest was virtually complete in the major oat-producing States.

Barley: Barley production for 1998 is estimated at 352 million bushels, down 2 percent from the previous year crop. Average yield per acre, at 60.1 was up 2.0 bushels from 1997. The area harvested for grain was estimated at 5.87 million acres, 5 percent less than 1997.

All Wheat: Production for 1998 is estimated at 2.55 billion bushels, down slightly from that published in the **Small Grains 1998 Summary**, but up 3 percent from the 1997 level. Most of the production decline is in Hard Red Winter wheat primarily due to a drop in grain area. All winter wheat is down fractionally from the last estimate, as is other spring wheat. Durum production is unchanged.

Rice: Production of rice totaled 188 million cwt, up 3 percent from 1997. Area for harvest, at 3.32 million acres, was up 7 percent from 1997. This season marked a year of acreage increases for all major rice states except California. The U.S. yield per harvested acre averaged 5,669 pounds, 228 pounds below last year.

Yields varied across States this year with California showing the largest decrease from a year ago. California yield per harvested acre averaged 6,840 pounds per acre, 1,410 pounds below 1997. Early-season crop development was notably later than normal in California due to cold, wet spring weather. The 1998 U.S. long grain rice yield was 39 pounds higher than 1997. Medium grain rice yield in 1998 was 732 pounds lower than a year ago. Short grain rice yield was 2,672 pounds lower than 1997.

Flaxseed: Production of flaxseed in 1998 totaled 6.71 million bushels, up 177 percent. The yield is estimated at 20.4 bushels, up 3.8 bushels above 1997 and is a record yield. A total of 336,000 acres were planted in 1998. This is the largest planted acreage since 1991. Area harvested, at 329,000 acres, more than doubled from last year's area of 146,000.

Peanuts: Production of peanuts in 1998 totaled 3.93 billion pounds, up 11 percent from the 1997 crop and 7 percent above the 1996 crop. Planted area for the U.S., at 1.51 million acres, was up 5 percent from 1997. Harvested area totaled 1.47 million acres, an increase of 4 percent from 1997. Planted acreage in Texas jumped 16 percent from a year ago, up 50,000 acres. The U.S. yield per harvested acre averaged 2,683 pounds, up 180 pounds from 1997.

Production in the Southeastern States (Alabama, Florida, Georgia, and South Carolina) is totaled 2.19 billion pounds, up 12 percent from 1997. The average yield for the 4-State area was 2,657 pounds per acre, 221 pounds above last year. Peanuts in Georgia proved much better than expected as yields averaged 330 pounds above last year. Hot, dry conditions during summer months reduced the crop in South Carolina.

Production from the Virginia-North Carolina area totaled 610 million pounds, up 17 percent from 1997. Near perfect conditions during most of the season increased yield and production potential in the growing area.

The Southwest crop (New Mexico, Oklahoma, and Texas) totaled 1.13 billion pounds, up 7 percent from a year ago. Yields in the tri-state area averaged 2,564 pounds per acre, 10 pounds below the 1997 crop. Texas growers recorded their highest production ever and tied last year's record yield of 2,610 pounds per acre.

Soybeans: Production in 1998 totaled 2.76 billion bushels, down slightly from the November 1 forecast but up 3 percent from 1997. The 1998 production is the highest on record followed by 1997 crop of 2.69 billion bushels. The average yield per acre in 1998 is estimated at 38.9 bushels, 0.3 bushel above the November 1 forecast. This is equal to the 1997 yield which is the second highest yield on record behind the 1994 yield of 41.4 bushels.

Planted area for the U.S., at 72.4 million acres, was up 3 percent from 1997, and is the largest planted acreage on record. Harvested area totaled 70.8 million acres, also a record and 2 percent above 1997.

Plantings in 1998 started at a fast pace and were completed ahead of 1997 and the average. In the eight major producing states, spring planting was completed ahead of last year but was delayed some due to wet conditions from early to mid-June in the Corn Belt States. Planting in the Mid-Atlantic and Southeastern States also ran ahead for most of the planting season but was slowed towards the end due to dry conditions.

Overall, this year's soybean crop matured well ahead of the last several years. In the Corn Belt States the crop got off to a good start as moisture was plentiful in most areas until about mid-August. Hot and drier conditions were more prevalent as the crop was reaching maturity during August and September. The crop in the Southeastern and Mid-Atlantic States was stressed by persistent dry and hot conditions. The drought stricken states had a larger portion of the acres either abandoned or cut for hay and harvested yields were lower than expected. Soybean harvest began early and progressed ahead of 1997 and the 5-year average with 96 percent of the crop harvested by November 15th.

The final pod counts were above the 1997 final count for most of the objective yield states. In Illinois, Indiana, and Missouri, the final pod counts were the highest on record. Pods counts were also higher than 1997 in Iowa, and Nebraska, but not at record levels.

Cotton: Upland cotton planted acreage is estimated at 13.1 million acres, up 4 percent from the August estimate, but down 4 percent from 1997. Harvested acreage at 10.5 million acres, was 20 percent less than last year, mainly due to the large abandonment in Texas. Producers planted 329,900 acres of American-Pima cotton in 1998, up 32 percent from 1997. However, harvested acreage was down 5 percent, at 236,500 acres, also because of the large abandonment in Texas.

Texas' harvest exceeded the 5-year average during the season, and in late November, harvest was 8 points ahead of the average pace of 87 percent. Texas' irrigated fields showed good progress this season, but drought and high temperatures resulted in 2.35 million acres being abandoned. At the end of August, approximately one-half of the acreage was rated in poor or very poor condition, 17 percent was rated good, and 3 percent was rated excellent. In late August, boll set was complete. Torrential rains in the south during October replenished topsoil moisture, but harvest was interrupted and regrowth became a problem in some fields. Objective yield survey data indicated the third lowest boll weights since 1988. Planted acres in Texas is estimated at 5.65 million, up 3 percent from 1997, and up 450,000 acres from the August estimate. Harvested acreage is down 37 percent from last year, at 3.30 million acres.

The Delta States' (Arkansas, Louisiana, Mississippi, Missouri, and Tennessee) planted and harvested 8 percent less acreage than in 1997. Plantings totaled 3.23 million acres and harvested area totaled 3.17 million acres. Planting was behind the 5-year average due to wet soils until mid-May, when a dry period allowed most States to exceed the average. During the first week of May, producers in Arkansas, Louisiana, and Mississippi planted about 30 percent of their acreage. The percent of the Arkansas crop rated in good to excellent condition on July 19, dropped 13 points from late June to 55 percent. Louisiana's rating dropped 12 points during this same time period to 38 percent, while Mississippi showed a only a 5 point drop to 70 percent in good to excellent condition. Hot and dry weather pushed the crop's development ahead of 5-year averages. Missouri's acreage received heavy rains during early August and then dry conditions began with mild temperatures, which lowered yield potential. During September, Louisiana and Mississippi were affected by two tropical storms and Hurricane Georges. The first storm, Frances, had high amounts of rainfall and also moved into southern Arkansas. Tropical storm Hermine made landfall in Louisiana, but had much less rain than the previous storm. In early November, harvest was 8 points behind the 5-year average pace in Missouri, at 70 percent, but the other States were ahead of the average pace. At this same time, Louisiana had 97 percent of the crop harvested, 5 points ahead of the 5-year average. Mississippi and Arkansas producers were 14 points above average with 98 percent and 91 percent of the acreage harvested, respectively, in early November. Tennessee's progress was 17 points ahead of the 5-year average at 92 percent, and excellent harvest conditions allowed growers to proceed with second pickings. Cotton objective yield data show Arkansas, Louisiana, and Mississippi had the lowest boll weights compared to the past 10 years.

Arizona's planted and harvested acres decreased by 23 percent from 1997, and California producers decreased planted and harvested acreage by 26 percent and 29 percent, respectively. Eighty-three percent of Arizona's crop was harvested in late November, 7 points behind the normal pace. California's seeding pace was well behind average most of the season as wet, cool weather prevailed which resulted in development remaining behind average. Only one percent of the California crop was harvested on October 4, 8 points behind average, and one month later producers were 47 points behind the average pace, with only 15 percent harvested. Boll opening was three-fourths complete compared to the 5-year average of 99 percent, on this same date, and the crop's condition was rated as 45 percent good and 45 percent in fair condition. During December, harvest made little progress in the central valley, due to the poor drying conditions, and some unharvested cotton fields were plowed under because of deteriorating lint quality and unopened bolls. A few fields were second picked, and plowdown for pink bollworm control was ongoing on sandier soils. The plowdown deadline for the southern San Joaquin Valley was extended fifteen days, due to the extremely late harvest season. California's boll weights ranked seventh since 1988.

In the Southeastern States (Alabama, Georgia, North Carolina, and South Carolina), cotton planted acreage was 2 percent less than in 1997, at 2.90 million acres, and harvested acreage was also down 2 percent, at 2.79 million acres. Plantings were behind average for most of the season except in Alabama, where producers exceeded the average planting pace. The weather remained hot and dry after plantings were completed. Hurricane Bonnie entered into North Carolina on August 26, with extreme winds and torrential rainfall, and covered approximately one-half of the cotton acreage in the State. The two largest producing counties were on the western edge of the storm weren't heavily affected. Hurricane Georges crossed southern Alabama and into Georgia during the September, with the heaviest rainfall in Alabama. Additionally, Tropical Storm Earl also affected these States cotton crop in early September with heavy rain. However, open weather during the fall resulted in larger production than earlier anticipated.

American-Pima production is forecast at 430,000 bales, down 22 percent from 1997's output, and down 2,500 bales from the December forecast. Yield is indicated at 873 pounds per harvested acre, down 183 pounds from last year's record high yield. California producers increased their seedings 8 percent from the previous year, to 200,000 acres, but Arizona's acreage decreased 28 percent from 1997 to 15,900 acres. Plantings in the San Joaquin Valley began with unseasonably cool, wet conditions, which kept progress to a minimum until the last of April. June temperatures in California were below normal and crop development was behind average throughout the season. Harvest progressed rapidly during the first half of November, although overall progress remained well behind normal. Light to moderate rains beginning in mid-month, delayed harvest and deteriorated lint quality. Harvest in the San Joaquin Valley was 80 percent complete in late November. In Texas a large amount of acreage seeded in non-traditional producing areas, was subject to substantial abandonment. Texas seeded acreage totaled 105,000 acres in 1998, but producers only harvested 32,000 acres. New Mexico producers reduced their planted and harvested acreage by 18 percent.

All cotton ginnings totaled 13,067,150 running bales prior to January 1, compared with 17,613,350 running bales ginned to the same date last year and 17,680,900 running bales in 1996.

Cottonseed: Production for 1998, based on a 3-year average lint-seed ratio, is expected to total 5.18 million tons, down 25 percent from 1997's production of 6.93 million tons.

Special Oilseeds: Planted acres for canola, mustard seed, safflower, and rapeseed increased sharply from 1997. Harvested acres for canola, at 1.1 million acres, increased 73 percent above 1997 and is the largest acreage on record. Mustard seed and safflower acres harvested increased 28 and 32 percent, respectively, from the previous year. Rapeseed acreage harvested more than doubled from 1997. Harvested yields for canola averaged 1,455 pounds and were 218 pounds above the 1997 yield. The yield for safflower, at 1,446 pounds per acre, was 376 pounds below the previous year. Mustard seed averaged 855 pounds per acre, 62 pounds above 1997. Rapeseed averaged 1,353 pounds per acre in 1998, up 110 pounds from 1997.

Sunflower: The 1998 Sunflower production totaled 5.25 billion pounds, 43 percent above the 1997 production, and the largest production since 1982. The estimated yield per acre, at 1,509 pounds, is up 192 pounds from 1997 and is a record yield. Planted area, at 3.55 million acres, was up sharply from 1997 and increased 23 percent from the 1997 acreage. Harvested area of 3.48 million acres increased 24 percent from last year.

In North Dakota, the leading state, production is estimated at 2.97 billion pounds, up 60 percent from 1997. The yield per acre, at 1,517 pounds, was 196 pounds above last year. Planted and harvested acres were up from 1997 by 35 and 39 percent, respectively.

All Hay: Production for 1998 was estimated at 151 million tons, down slightly from the October 1 forecast and 1 percent below the 1997 total. Acreage harvested, at 60.0 million acres, is essentially unchanged from the October forecast and 2 percent below 1997. The average yield, at 2.52 tons per acre, was 1 percent below the October forecast and 1 percent above the previous year.

South Dakota moved to the number one hay producing state followed by California, Kansas, Missouri, and Nebraska. Texas dropped from the number one state in 1997 to seventh in 1998. Twenty nine states had increased production while the drought stricken south had lower production.

Alfalfa and Alfalfa Mixtures: Production in 1998 totaled 82.0 million tons, down 1 percent from the October 1 forecast and up 4 percent from the 1997 total. Harvested acreage, at 23.6 million acres, was up 1 percent from October 1 and essentially unchanged from a year ago. Yields averaged 3.47 tons per acre, up 0.14 tons from the previous year.

The majority of producing States showed increases in average yields from 1997 while 16 states had yield decreases. Oklahoma had the largest decrease, down 1.20 tons per acre.

All Other Hay: Production in 1998 totaled 69.3 million tons, essentially unchanged from the October 1 forecast but down 6 percent from the 1997 total. A decrease in both harvested acreage and average yields resulted in the decreased production. Area for harvest, at 36.3 million acres, was essentially unchanged from October 1 and 3 percent below 1997. Average yield, at 1.91 tons per acre, was down 3 percent from 1997.

Harvested acreage increased or stayed the same in 23 states and decreased in 25 states from 1997. Texas the leading state for harvested acres was down 9 percent from 1997. Total production decreased 4.7 million tons and Texas accounted for 87 percent of the decrease. Twenty five States had increased yields but could not offset the decreases in other States.

Dry Edible Beans: Production of dry edible beans is estimated at 30.8 million cwt for 1998, 5 percent above 1997 and 9 percent above two years ago. Area for harvest is estimated at 1.91 million acres, up 9 percent from both 1997 and 1996. The average yield, at 1,611 pounds per acre, dropped 59 pounds from 1997.

The major producing states of North Dakota, Minnesota, and Colorado had major increases in acres harvested from 1997. Minnesota harvested 175,000 acres, the highest on record. North Dakota harvested 710,000 acres, the fourth highest on record, and Colorado growers cut 155,000 acres.

In North Dakota, early planting, adequate moisture, and warm temperatures pushed development of the crop well ahead of average. Dry conditions during August through September contributed to the harvest progressing two weeks ahead of average. Harvest was virtually complete by the end of September, well ahead of average.

Michigan's dry bean planting proceeded on schedule with dry soil conditions. Germination was slower than normal due to dry, cool soil and deeper planting depth. Dry weather persisted throughout the growing season with harvest nearly complete by October 1, the earliest on record. Yield results were mixed.

Cutting in Nebraska was 6 percent ahead of average by late September but finished in late October slightly behind average. In California the cool, wet spring postponed planting and cooler than normal weather hampered drying, placing the harvest well behind schedule.

Crop development in Idaho was behind normal for most of the season. Cool, wet weather during May and June was followed by extremely high temperatures and dry conditions in July. The progress of the harvest started behind average with the Southcentral areas reporting rain damage in late September. However, the harvest finished slightly ahead of average in late October.

In New York, the early varieties (black, white, and cranberry) were planted under ideal conditions. The light red varieties, which comprise the largest acreage, lost acreage due to extremely wet conditions during planting. The wet spring also took its toll on yields this season. Excess moisture early in the growing season, followed by a dry spell, resulted in a poor pod set and reduced plant size. The weather during harvest was excellent and progress was two weeks ahead of the normal pace.

Growers in Colorado and Minnesota generally had a good year. Harvest in Colorado was virtually completed by late September. In Wisconsin irrigated acres did well, but non irrigated fields showed shriveled beans in pods and poor yields due to dry conditions. Most dry bean acreage in the state is irrigated. Yields were down in Utah due to dry conditions during the summer. With favorable growing conditions for dry edible beans, Montana had above average yields and good quality.

Even though U.S. production is up, production is below 1997 in all estimating states except Colorado, Montana, North Dakota, Washington, and Wyoming. Colorado increased 26 percent and North Dakota increased 38 percent from 1997.

Production of many minor varieties are below 1997 levels except for black, pink, and pinto varieties. Black production increased 68 percent, pink increased 30 percent, and pinto increased 33 percent from 1997.

Lentils: Production of lentils in Idaho, Montana, North Dakota, and Washington is estimated at 1.94 million cwt, down 19 percent from the 1997 crop. Harvested area is estimated at 158,500 acres, 24,500 acres less than 1997. Average yield per acre is 1,223 pounds, 92 pounds below last year.

Harvested acreage in Idaho is estimated at 56,000 acres, 10,000 acres less than 1997. Average yields in Idaho slipped 250 pounds from last season to 1,150 pounds per acre. Yields were affected by temperature variations during the growing season which placed added stress on the crop. In Washington, harvested acreage is estimated at 62,000 acres, 20,000 less than 1997. Average yields dipped only 10 pounds from last year to 1,350 pounds per acre.

Wrinkled Seed Peas: Production of wrinkled seed peas in the two Northwest States (Idaho and Washington) totaled 674,000 cwt in 1998, 1 percent below the 1997 crop but 23 percent above the 1996 crop.

Dry Edible Peas: Production of dry peas in Idaho, Montana, Nevada, North Dakota, Oregon, and Washington in 1998 is estimated at 5.93 million cwt, 3 percent more than 1997's production and more than double the 1996 crop. Growers in Montana and North Dakota continue to seed more dry peas while dry pea acres in Idaho and Washington were both below 1997.

Overall, planted area in the U. S. reached 323,400 acres, 19,800 acres above 1997. Harvested acres stood at 309,100 acres compared with 281,600 acres last year. Average yields were 123 pounds below last year at

1,920 pounds per acre. Growers in Idaho saw their yields decline 400 pounds per acre from last year due in part to wet conditions and hail.

Austrian Winter Peas: The 1998 Austrian winter pea production of 104,000 cwt in Idaho and Oregon is down 10 percent from 1997 but slightly above the 1996 production. Area harvested, at 7,400 acres, is down 200 acres from last year, while the average yield decreased 108 pounds in to 1,405 pounds. Wet weather was responsible for the reduction in yields in Idaho.

All Potatoes: Total U.S. 1998 potato production from all four seasons is estimated at 478 million cwt, up 2 percent from 1997 but 4 percent below 1996. Harvested area, at 1.39 million acres, was up 3 percent from 1997. Average yield of 343 cwt per acre was down 2 cwt from the previous year.

Winter Potatoes: Winter potato production is estimated at 2.98 million cwt, down 13 percent from a year earlier and 9 percent below 1996. Harvested acreage was estimated at 15,000 acres, 6 percent below 1997, while the final yield of 199 cwt per acre fell 15 cwt short of the previous year.

Spring Potatoes: Production estimates of spring potatoes totaled 21.1 million cwt in 1998, down 5 percent from a year earlier and 6 percent below 1996. Harvested area totaled 90,600 acres, up 4 percent from 1997, while the average yield of 233 cwt per acre was down 22 cwt from last year.

Summer Potatoes: Growers produced 19.3 million cwt of summer potatoes in 1998, up 6 percent from 1997 and up slightly from 1996. Harvested area, at 68,800 acres, increased 6 percent, while the average yield of 280 cwt per acre remained the same as 1997.

Fall Potatoes: Production of fall potatoes for 1998 is 434 million cwt, up 3 percent from last year but 4 percent below 1996. The production estimate is virtually unchanged from the December forecast. Area harvested, at 1.22 million acres, is up 3 percent from last year but 2 percent below 1996. The average yield is 356 cwt per acre, down 1 cwt from last year and 8 cwt below two years ago. Planting started on time this year and most States had good early weather. A hotter than normal summer in Western States caused rougher and smaller potatoes and lower yields. Harvest was delayed as long as possible to gain more size. Central and Eastern States had good size and yields. Compared with last month, an increase in production was indicated in South Dakota, but a decrease registered in Nebraska.

Five Eastern States produced 29.5 million cwt of fall potatoes in 1998, down 3 percent from last year and 12 percent below two years ago. Area for harvest totaled 109,200 acres, down 5 percent from last year. The average yield of 270 cwt per acre gained 6 cwt from a year ago. Planting started early this year, but heavy June rains bogged down some fields. The rest of the summer was dry, resulting in yields that were variable. Production in Maine slipped 5 percent from a year ago because fewer acres were planted. However, average yields were up. Better yields pushed production in Pennsylvania up 6 percent and New York up 2 percent. Production in Massachusetts was down 19 percent, and Rhode Island lost 32 percent from last year.

Eight Central States' production is at 107.7 million cwt this year, a jump of 10 percent from last year but slightly below the record crop in 1996. Harvested area totaled 362,400 acres, a gain of 4 percent from last year. The average yield of 297 cwt per acre increased 17 cwt from last year, including record high yields in North Dakota (tied with 1994), Michigan, and Indiana. Production in North Dakota and Indiana increased more than 30 percent from last year. South Dakota's production is up 29 percent. Heavy summer rains took

out some fields in Minnesota and Ohio, but yields were generally high. Fewer acres for harvest but better yields increased Wisconsin's production by 2 percent from last year. Good yields in Michigan at the end of the season resulted in a 3 percent larger potato crop. Nebraska's potato crop was up 5 percent, Minnesota increased 4 percent, and Ohio improved 3 percent over last year.

Ten Western States produced 297.2 million cwt in 1998, up 1 percent from last year but 4 percent below two years ago. Area harvested, at 748,400 acres, increased 4 percent, while the average yield of 397 cwt per acre was down 12 cwt from a year ago. Summer heat led to smaller sizes, lower solids, and rougher potatoes in the Western States. Higher acreage gave Washington a 6 percent larger crop even though yields were down. Good yields in Colorado increased production by 2 percent. Production in all other Western States is down, primarily because of lower yields. Production in Idaho slid less than 1 percent from last year, Oregon is off 4 percent, and California dropped 12 percent. New Mexico and Utah productions fell 6 and 24 percent, respectively. Nevada's production dropped 8 percent and Montana declined 4 percent from last year.

Sweet Potatoes: The 1998 production of sweet potatoes is estimated at 11.9 million cwt, down 11 percent from last year and 10 percent below 1996. Growers harvested 83,800 acres, a gain of 2 percent from last year. The average yield of 142 cwt per acre fell 20 cwt. Dry summer weather hurt fields from South Carolina to Texas.

Tobacco: U.S. tobacco production totaled 1.53 billion pounds, down 1 percent from the November 1 forecast and 14 percent below 1997. Growers harvested 726,910 acres in 1998, 3 percent less than the November 1 forecasted acreage and down 13 percent from last year. Yield per acre averaged 2,104 pounds, a 40 pound increase from the previous forecast but down 33 pounds from 1997.

Flue-cured production is estimated at 833 million pounds, an increase of 1 percent from the November 1 forecast but 20 percent less than last year. Harvested acres totaled 369,800, down 4 percent from the previous forecast and 19 percent below 1997. Flue-cured yields averaged 2,253 pounds, an increase of 109 pounds from the November 1 forecast but down 32 pounds from 1997.

Burley production totaled 608 million pounds in 1998, down 4 percent from the December 1 forecast and 6 percent below last year's output. Growers harvested 315,400 acres in 1998, 2 percent below previously forecasted acres and 6 percent less than last year. Yield per acre averaged 1,928 pounds, down 32 pounds from the December 1 forecast and down 6 pounds from last year.

Sugarbeets: Production is estimated at 32.7 million tons, 9 percent above the 1997 final production estimate, and 1 percent above the November 1 forecast. This is the largest production on record, 3 percent above the previous record of 31.9 million tons set in 1994. Harvested acres in the 12 sugarbeet producing states is estimated at 1.45 million acres, 2 percent above 1997 but 4,600 acres below the November 1 forecast. Yield is estimated at a record 22.5 tons per acre, 0.2 ton above November 1 and 0.1 ton above the previous record set in 1981 and tied in 1987.

Warm, sunny weather provided excellent planting conditions in the northern Great Plains and Great Lakes Region, allowing growers in North Dakota and Minnesota to set new record highs for planted acres. Planted acres doubled in Washington in anticipation of the opening of a new processing plant. In California, planting progressed nearly a month behind normal due to cold, wet spring weather. No acres were planted in Texas or New Mexico due to the closing of the plant in Texas. Heavy rains drowned several thousand acres in the Red River Valley of Minnesota and North Dakota, accounting for most of the abandonment. A few thousand acres were abandoned in Michigan due to drought losses. Fewer acres were abandoned in California, but growth was hindered most of the season, first by cool weather, then hot weather during the middle of the summer, and finally cold weather again as the growing season ended. Warm weather extended the growing season in most of the Great Plains States and contributed to the record yields and production in North Dakota and Minnesota. Idaho production also took a sizable jump due to higher yields. Colorado, Montana,

Nebraska, and Oregon had yields above 1997. In California, yields were lower than a year earlier due to the shortened growing season and poor weather. Hot, dry weather reduced yields in Michigan compared to a year ago, but accelerated the harvest, which was completed in less than 2 weeks. Harvest started slowly in the northern Great Plains, but by October 1, cooler temperatures combined with dry weather improved harvest and stockpiling conditions. In California, harvest began 3 to 4 weeks later than normal and continued until late November. Sucrose content was expected to be below average in most States due to above-average temperatures during most of the summer.

Sugarcane: U.S. sugarcane production for sugar and seed in 1998 is estimated at 33.7 million tons, up 3 percent from the December 1 forecast and 6 percent above the previous record established in 1997. Part of the production increase was due to an increase in acres for harvest and the rest of the increase resulted from a higher yield. An increase of 15,000 acres for sugar production in Louisiana accounted for the change in harvested area. Total acres for sugar production increased to 892,800 and acres for sugar and seed are estimated at 949,500. The yield for sugar and seed production was estimated at a record 35.5 tons per acre, above the December 1 forecast of 35.1 tons per acre and the 1997 yield of 34.7 tons per acre. The higher yield resulted from an increase in the estimated yield in Florida.

Drought hindered vegetative development in the western Gulf Coast sugarcane producing states during the summer months. Growth accelerated when late summer rains ended the drought and continued as warm weather extended the growing season. The late season growth spurt, combined with expanded use of higher yielding varieties and utilization of better harvesting equipment, resulted in a record yield and production in Louisiana. A record high yield and production is also estimated in Florida, where additional growth in unharvested fields added tonnage to be harvested. Tropical Storm Mitch did little damage to the crop, but harvest was delayed and mills were forced to shut down operations for several days. Mills expect to be open until early April.

Peppermint Oil: Production of peppermint oil in 1998 is estimated at 9.7 million pounds, down 2 percent from 1997. Harvested acres is estimated at 124,000, down 9 percent from 1997 and the lowest acreage since 1994. The average 1998 yield was a record high 78 pounds of oil per acre, up 4 pounds from 1997. Idaho, Indiana, and Oregon growers produced record high yields in 1998.

Spearmint Oil: Production of spearmint oil in 1998 is estimated at 2.99 million pounds, up 22 percent from 1997. Area for harvest stood at 27,400 acres, compared with 25,500 acres in 1997. The average yield per acre was a record 109 pounds of oil per acre, compared with 96 pounds the previous year. Washington growers produced 72 percent of the 1998 crop, with a record high average yield of 153 pounds of oil per acre. Above normal temperature, below normal precipitation in the summer, and adequate irrigation water attributed to the high yield in Washington.

Hops: Production of hops in 1998 in Idaho, Oregon, and Washington was 59.5 million pounds, down 20 percent from 1997 with all three states contributing to the decline. This is the smallest crop since 1990 when 56.9 million pounds were produced. Area harvested, at 36,643, acres was 15 percent less than last year with only Idaho indicating a net gain of 39 acres from 1997. Oregon and Washington area for harvest fell 2,191 and 4,507 acres, respectively, from the past year. Oregon growers were the only producers to show a yield increase over 1997. Both Idaho and Washington growers experienced sharp yield reductions. Idaho growers averaged 1,159 pounds per acre, the lowest yield since 1948, while producers in Washington averaged 1,686 pounds per acre, the smallest yield since 1990. Hot weather conditions during July and August were mostly responsible for the poor yields in Idaho and Washington. Other factors including disease and insect problems also lowered yield potential.

Washington growers, in spite of a difficult year, produced three-fourths of the total 1998 crop. As a result of the powdery mildew situation in Washington, there were large shifts between varieties. Growers sharply increased the Columbus/Tomahawk variety to 3,999 acres in 1998 while the Tettanager variety fell to 252 acres, down 1,312 acres from 1997.

Maple Syrup: The 1998 U.S. maple syrup production totaled 1.16 million gallons, down 11 percent from last year and 26 percent below 1996. Maple syrup production decreased in all States except Connecticut, Massachusetts, and Pennsylvania. In Maine, New Hampshire, and Vermont, weather conditions were not favorable for tapping due to warmer than normal temperatures. These temperatures caused the sap to begin running in early February and to end by early April. New York saw a major decline in the number of taps due to an ice storm in January. The tapping season in Michigan, Ohio, and Wisconsin started earlier than normal, with mild temperatures causing a poor flow of sap. Pennsylvania's weather during tapping went from warm to cold and back to warm, but produced a good flow of sap. All States except Massachusetts, New York, and Pennsylvania averaged a lower yield per tap. Overall, the tapping season was the same length as last season but started more than a week earlier. Syrup color was medium to light amber. The sap's sugar content was slightly higher than last year for the nation but a little lower in New England. Wisconsin had the highest sugar content, followed by Maine.

Coffee: Hawaii coffee production is estimated at 9.00 million pounds (parchment basis) for the 1998-99 season, down 4 percent from the previous crop. Relatively dry weather conditions hampered flowering and reduced fruit set.

Taro: Hawaii taro production for 1998 was estimated at 6.00 million pounds, up 9 percent from last year. Area harvested, at 490 acres, was up 40 acres from 1997. Yields of taro used for poi increased due to improved weather and the subsiding of the Taro Pocket Rot disease. Weather conditions for fresh use taro were generally unfavorable, initially too dry then too wet. *Phytophthora* (leaf blight) became widespread with the advent of rainy weather and corm development was hampered.

Ginger Root: Hawaii ginger root production for the 1997-98 season is estimated at 18.0 million pounds, up 49 percent from the previous season. Beneficial weather, improved cultural practices, and a 31 percent increase in harvested acreage contributed to the increased production. Yields averaged 50,000 pounds per harvested acre, tying the record high. Weather conditions favored the development of the 1997-98 ginger root crop. Disease remained a slight problem for some farmers.

New Seedings of Alfalfa and Alfalfa Mixtures: Growers seeded 3,549,000 acres of alfalfa and alfalfa mixtures during 1998. This is down 5 percent from the 1997 seeded acreage of 3,737,000 acres. The newly seeded acres of alfalfa and alfalfa mixtures will normally be harvested for dry hay for the first time in the year following planting. The newly seeded acres in 1997 account for 15.8 percent of the acres of alfalfa and alfalfa mixtures harvested for dry hay in 1998.

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