

Crop Production



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Corn production up 2 percent Soybeans up 3 percent All Cotton down 5 percent

Corn grain production is forecast at 9.74 billion bushels, up 2 percent from last month and up 4 percent from 1997. Based on September 1 conditions, yields are expected to average 132.0 bushels per acre, up 2.0 bushels from last month and up 5 bushels from a year ago. If realized, this would be the second largest production and the second highest yield on record. Acreage for harvest is estimated at 73.8 million acres, unchanged from last month and virtually unchanged from 1997.

All cotton production is forecast at 13.6 million bales, down 5 percent from last month and down 28 percent from 1997. Yield is expected to average 614 pounds per harvested acre, down 66 pounds from last year. Hot and dry conditions continued during the month in most of the cotton belt, which lowered yield potential. Arkansas' production was lowered 210,000 bales from August, and both California and Texas were lowered 100,000 bales. Upland harvested acres were lowered 95,000 from last month, 45,000 acres in California and 50,000 acres in Georgia.

Soybean production is forecast at a record high 2.91 billion bushels, up 3 percent from August 1, and up 7 percent from last year's record of 2.73 billion bushels. The yield forecast, at 40.6 bushels per acre, increased 1.1 bushels from last month and is 1.6 bushels above the 1997 final yield. If realized, this will be the second highest yield on record. The record yield of 41.4 bushels was set in 1994. Acreage for harvest is estimated at a record 71.6 million acres, unchanged from August 1 but up 2 percent from 1997.

All wheat production is placed at 2.56 billion bushels, up 1 percent from the August forecast and 2 percent from 1997. The U.S. yield is forecast at 43.3 bushels per acre. This is up 0.3 bushels from last month and is a new record high yield.

Other spring wheat production is forecast at 519 million bushels, up 2 percent from last month, but down 7 percent from last season. The final forecast of U.S. average yield is 34.9 bushels per acre. This is 0.7 bushels per acre better than a month ago. There were no area changes. Hard Red Spring production is up 2 percent from August at 467 million bushels. White Spring production is down about 2 percent. Minnesota growers have harvested a better yielding crop than previously expected. Both the Montana and North Dakota crops are nearing harvest completion. The South Dakota harvest is finished.

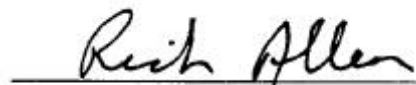
Durum wheat production is forecast at 132 million bushels, up 4 percent from last month and 53 percent more than in 1997. This is the biggest Durum crop since 1982. The U.S. yield is now forecast at 36.8 bushels per acre, up 1.6 from last month and second only to the record high set in 1992. As of September 6, 83 percent of North Dakota's crop was harvested. This is about 3 weeks ahead of average.

California Navel Oranges: Production for 1998-99 is forecast at 34.0 million boxes, down 23 percent from last season's production of 44.0 million boxes. This initial forecast of the 1998-99 season is based on an objective measurement survey conducted in the California Central Valley. Fruit set and size are considerably less than last season. Crop development was delayed by the wet, cool spring.

This report was approved on September 11, 1998.



Acting Secretary of
Agriculture
August Schumacher, Jr.



Agricultural Statistics Board
Chairperson
Rich Allen

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**Corn for Grain: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

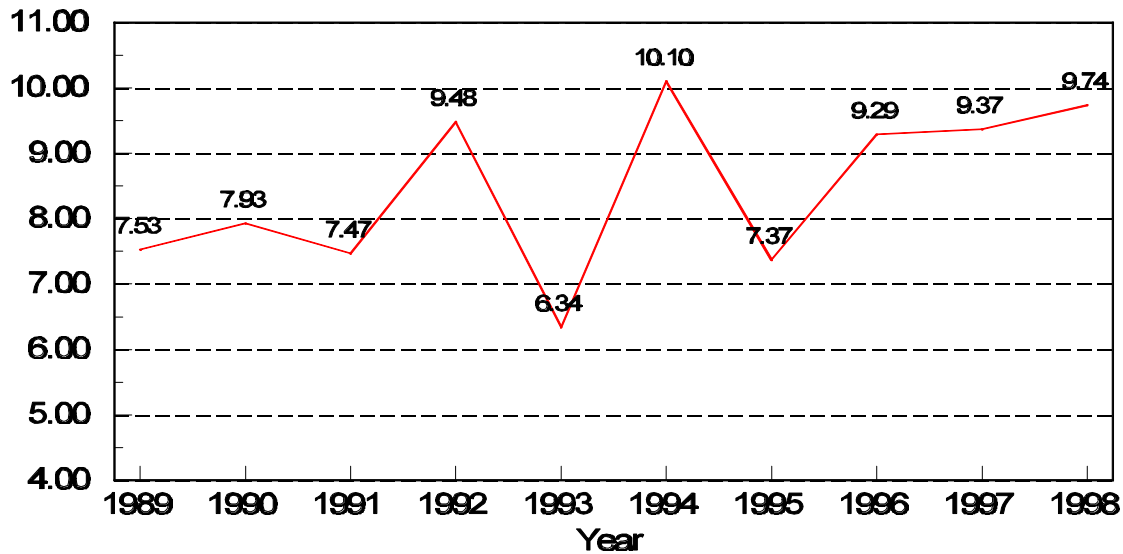
State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	265	290	87.0	65.0	60.0	23,055	17,400
AZ ¹	50	25	170.0	170.0	170.0	8,500	4,250
AR ¹	175	210	125.0	115.0	115.0	21,875	24,150
CA	260	255	170.0	160.0	160.0	44,200	40,800
CO ²	1,030	1,070	146.0	142.0	140.0	150,380	149,800
CT ²							
DE	144	144	110.0	100.0	100.0	15,840	14,400
FL ¹	80	55	80.0	60.0	60.0	6,400	3,300
GA	500	400	110.0	90.0	88.0	55,000	35,200
ID ¹	40	50	155.0	160.0	160.0	6,200	8,000
IL	11,050	10,400	129.0	143.0	145.0	1,425,450	1,508,000
IN	5,850	5,650	123.0	136.0	139.0	719,550	785,350
IA	12,000	12,400	138.0	143.0	143.0	1,656,000	1,773,200
KS	2,700	2,850	143.0	143.0	143.0	386,100	407,550
KY	1,170	1,250	103.0	125.0	125.0	120,510	156,250
LA ¹	490	650	117.0	80.0	80.0	57,330	52,000
ME ²							
MD	415	420	90.0	105.0	100.0	37,350	42,000
MA ²							
MI	2,250	2,000	117.0	104.0	102.0	263,250	204,000
MN	6,450	6,750	133.0	135.0	141.0	857,850	951,750
MS ¹	470	515	107.0	80.0	80.0	50,290	41,200
MO	2,870	2,700	116.0	121.0	121.0	332,920	326,700
MT ¹	14	15	135.0	130.0	130.0	1,890	1,950
NE	8,725	8,550	132.0	141.0	145.0	1,151,700	1,239,750
NH ²							
NJ ¹	93	98	108.0	124.0	124.0	10,044	12,152
NM ¹	85	75	175.0	170.0	170.0	14,875	12,750
NY	650	700	116.0	110.0	114.0	75,400	79,800
NC	870	780	89.0	75.0	70.0	77,430	54,600
ND	605	825	99.0	93.0	98.0	59,895	80,850
OH	3,450	3,200	134.0	140.0	143.0	462,300	457,600
OK ¹	190	240	140.0	120.0	120.0	26,600	28,800
OR ¹	22	28	195.0	180.0	180.0	4,290	5,040
PA	985	1,050	99.0	108.0	105.0	97,515	110,250
RI ²							
SC	335	275	97.0	45.0	40.0	32,495	11,000
SD	3,400	3,850	98.0	100.0	106.0	333,200	408,100
TN	650	690	102.0	105.0	105.0	66,300	72,450
TX	1,800	1,850	138.0	95.0	95.0	248,400	175,750
UT ¹	23	24	135.0	133.0	133.0	3,105	3,192
VT ²							
VA	325	360	93.0	95.0	90.0	30,225	32,400
WA ¹	95	95	190.0	185.0	185.0	18,050	17,575
WV ¹	37	40	95.0	105.0	105.0	3,515	4,200
WI	3,050	2,900	132.0	125.0	130.0	402,600	377,000
WY ¹	57	60	135.0	124.0	124.0	7,695	7,440
US	73,720	73,789	127.0	130.0	132.0	9,365,574	9,737,949

¹ Estimates for current year carried forward from an earlier forecast.

² Not estimated.

U.S. Corn Production 1989 - 1998

Billion Bushels



Sorghum for Grain: Area Harvested, Yield, and Production by State and United States, 1997 and Forecasted September 1, 1998

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL ¹	8	6	50.0	40.0	40.0	400	240
AR	150	130	74.0	67.0	62.0	11,100	8,060
CO	140	150	40.0	48.0	48.0	5,600	7,200
GA ¹	40	30	40.0	37.0	37.0	1,600	1,110
IL	155	145	91.0	88.0	88.0	14,105	12,760
KS	3,500	3,300	78.0	77.0	77.0	273,000	254,100
KY ¹	12	17	75.0	83.0	83.0	900	1,411
LA	98	100	77.0	65.0	65.0	7,546	6,500
MS	33	28	75.0	75.0	65.0	2,475	1,820
MO	440	340	93.0	85.0	85.0	40,920	28,900
NE	750	700	82.0	95.0	98.0	61,500	68,600
NM	235	80	44.0	65.0	60.0	10,340	4,800
NC ¹	11	14	50.0	60.0	60.0	550	840
OK	490	350	50.0	50.0	50.0	24,500	17,500
SC ¹	4	3	40.0	35.0	35.0	160	105
SD	160	125	71.0	65.0	65.0	11,360	8,125
TN ¹	15	20	80.0	75.0	75.0	1,200	1,500
TX	3,150	2,300	59.0	46.0	46.0	185,850	105,800
US	9,391	7,838	69.5	67.4	67.5	653,106	529,371

¹ Estimates for current year carried forward from an earlier forecast.

**Barley: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AZ ¹	67	53	102.0	120.0	120.0	6,834	6,360
CA ¹	180	140	55.0	60.0	60.0	9,900	8,400
CO	90	85	112.0	108.0	108.0	10,080	9,180
DE ¹	35	30	89.0	67.0	67.0	3,115	2,010
ID	760	760	79.0	80.0	78.0	60,040	59,280
KS ¹	8	9	40.0	45.0	45.0	320	405
KY ¹	14	8	75.0	63.0	63.0	1,050	504
MD ¹	50	48	80.0	62.0	62.0	4,000	2,976
MI ¹	24	28	60.0	52.0	52.0	1,440	1,456
MN	540	450	51.0	57.0	57.0	27,540	25,650
MT	1,200	1,300	53.0	52.0	52.0	63,600	67,600
NE ¹	8	8	51.0	46.0	46.0	408	368
NV ¹	4	4	105.0	95.0	95.0	420	380
NJ ¹	4	4	75.0	52.0	52.0	300	208
NC ¹	20	20	70.0	63.0	63.0	1,400	1,260
ND	2,250	1,930	45.0	55.0	55.0	101,250	106,150
OK ¹	8	5	42.0	45.0	45.0	336	225
OR	120	140	69.0	77.0	77.0	8,280	10,780
PA ¹	75	75	68.0	68.0	68.0	5,100	5,100
SC ¹	3	1	60.0	52.0	52.0	180	52
SD	130	125	38.0	50.0	47.0	4,940	5,875
TX ¹	5	5	47.0	35.0	35.0	235	175
UT	95	85	86.0	89.0	87.0	8,170	7,395
VA ¹	65	75	85.0	64.0	64.0	5,525	4,800
WA	490	520	76.0	65.0	65.0	37,240	33,800
WI	65	65	55.0	52.0	52.0	3,575	3,380
WY	115	105	80.0	82.0	82.0	9,200	8,610
US	6,425	6,078	58.3	61.6	61.3	374,478	372,379

¹ Estimates for current year carried forward from an earlier forecast.

**All Wheat: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL ¹	100	90	42.0	45.0	45.0	4,200	4,050
AZ ¹	98	152	89.5	99.5	99.5	8,775	15,120
AR ¹	820	900	48.0	51.0	51.0	39,360	45,900
CA ¹	544	545	80.3	77.8	77.8	43,680	42,425
CO ¹	2,900	2,798	32.7	39.6	39.6	94,700	110,898
DE ¹	73	73	73.0	57.0	57.0	5,329	4,161
FL ¹	15	13	39.0	41.0	41.0	585	533
GA ¹	360	240	44.0	43.0	43.0	15,840	10,320
ID ¹	1,440	1,290	79.2	80.8	80.0	114,060	103,180
IL ¹	1,150	1,200	61.0	48.0	48.0	70,150	57,600
IN ¹	660	650	58.0	58.0	58.0	38,280	37,700
IA ¹	27	38	42.0	40.0	40.0	1,134	1,520
KS ¹	11,000	10,100	46.0	49.0	49.0	506,000	494,900
KY ¹	530	550	54.0	44.0	44.0	28,620	24,200
LA ¹	115	90	37.0	45.0	45.0	4,255	4,050
MD ¹	215	215	68.0	55.0	55.0	14,620	11,825
MI ¹	540	570	62.0	56.0	56.0	33,480	31,920
MN ¹	2,465	1,780	32.0	36.8	39.7	78,890	70,635
MS ¹	175	140	43.0	44.0	44.0	7,525	6,160
MO ¹	1,040	1,230	55.0	46.0	46.0	57,200	56,580
MT ¹	5,930	5,190	31.3	31.3	31.3	185,630	162,690
NE ¹	1,900	1,830	37.0	46.0	46.0	70,300	84,180
NV ¹	16	14	98.4	100.0	100.0	1,575	1,400
NJ ¹	34	45	60.0	48.0	48.0	2,040	2,160
NM ¹	285	265	35.0	28.0	28.0	9,975	7,420
NY ¹	135	135	56.0	54.0	54.0	7,560	7,290
NC ¹	670	680	52.0	42.0	42.0	34,840	28,560
ND ¹	11,025	9,465	24.3	30.4	31.7	267,695	300,080
OH ¹	1,090	1,160	63.0	64.0	64.0	68,670	74,240
OK ¹	5,400	5,400	33.0	38.0	38.0	178,200	205,200
OR ¹	970	905	65.4	67.8	67.8	63,430	61,395
PA ¹	175	190	52.0	53.0	53.0	9,100	10,070
SC ¹	300	240	50.0	32.0	32.0	15,000	7,680
SD ¹	3,469	3,289	28.6	36.7	36.7	99,213	120,754
TN ¹	370	370	45.0	41.0	41.0	16,650	15,170
TX ¹	4,100	4,000	29.0	36.0	36.0	118,900	144,000
UT ¹	189	177	48.5	50.8	50.8	9,174	8,985
VA ¹	250	240	68.0	50.0	50.0	17,000	12,000
WA ¹	2,595	2,565	64.8	63.6	63.4	168,080	162,555
WV ¹	9	9	54.0	55.0	55.0	486	495
WI ¹	142	142	56.9	54.1	54.1	8,075	7,677
WY ¹	256	236	32.3	30.0	30.0	8,276	7,091
US	63,577	59,211	39.7	43.0	43.3	2,526,552	2,564,769

¹ Estimates for current year carried forward from an earlier forecast.

**Durum Wheat: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AZ ¹	89	144	90.0	100.0	100.0	8,010	14,400
CA ¹	144	175	95.0	105.0	105.0	13,680	18,375
MN	5	5	34.0	35.0	37.0	170	185
MT	280	440	26.0	26.0	26.0	7,280	11,440
ND	2,570	2,800	22.0	29.0	31.0	56,540	86,800
SD	19	19	27.0	24.0	26.0	513	494
US	3,107	3,583	27.7	35.2	36.8	86,193	131,694

¹ Estimates for current year carried forward from an earlier forecast.

**Other Spring Wheat: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
CO ¹	50	48	70.0	76.0	76.0	3,500	3,648
ID	570	520	78.0	79.0	77.0	44,460	40,040
MN	2,400	1,720	32.0	37.0	40.0	76,800	68,800
MT	4,200	3,500	29.0	30.0	30.0	121,800	105,000
NV ¹	5	8	95.0	100.0	100.0	475	800
ND	8,400	6,600	25.0	31.0	32.0	210,000	211,200
OR ¹	130	115	55.0	53.0	53.0	7,150	6,095
SD	2,400	1,850	28.0	32.0	32.0	67,200	59,200
UT ¹	29	27	46.0	55.0	55.0	1,334	1,485
WA	445	465	54.0	48.0	47.0	24,030	21,855
WI ¹	7	7	35.0	36.0	36.0	245	252
WY ¹	21	11	36.0	31.0	31.0	756	341
US	18,657	14,871	29.9	34.2	34.9	557,750	518,716

¹ Estimates for current year carried forward from an earlier forecast.

**Wheat: Production by Class, United States, 1996-97
and Forecasted September 1, 1998¹**

Year	Winter			Spring			Total
	Hard Red	Soft Red	White	Hard Red	White	Durum	
	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
1996	761,412	422,019	293,627	630,866	61,119	116,090	2,285,133
1997	1,120,891	483,890	277,828	500,643	57,107	86,193	2,526,552
1998	1,200,027	448,664	265,668	466,993	51,723	131,694	2,564,769

¹ Wheat class estimates are based on varietal acreage survey data available for all wheat producing States. Unless unusual situations dictate, the previous end-of-season class percentages are used throughout the forecast season.

**Rice: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
AR	1,370	1,525	5,650	5,500	5,600	77,370	85,400
CA	510	478	8,300	7,700	7,800	42,341	37,284
LA	548	588	4,630	4,200	4,450	25,364	26,166
MS	238	218	5,800	5,400	5,400	13,804	11,772
MO ¹	109	124	5,300	5,100	5,100	5,777	6,324
TX	259	254	5,500	5,600	5,600	14,240	14,224
US	3,034	3,187	5,896	5,576	5,685	178,896	181,170

¹ Estimates for current year carried forward from an earlier forecast.

**Rice: Production by Class, United States,
1996-97 and Forecasted September 1, 1998**

Year	Long Grain	Medium Grain	Short Grain	All
	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
1996	113,351	56,901	1,069	171,321
1997	121,647	55,833	1,416	178,896
1998 ¹	132,934	46,597	1,639	181,170

¹ Indicated September 1, 1998, rice class estimates are based on a five-year average of class percentages. The class percentages are adjusted as data become available through the growing season.

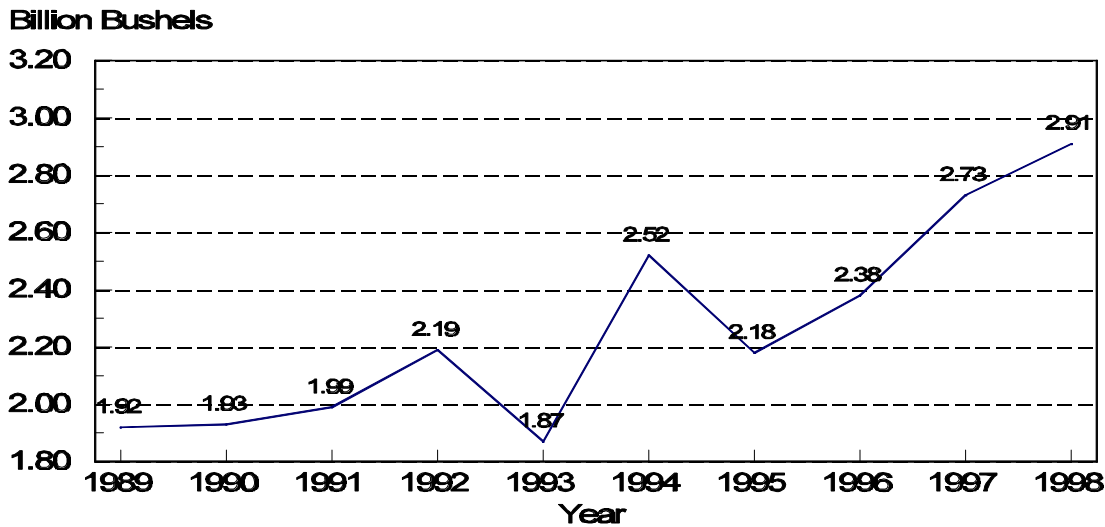
Soybeans for Beans: Area Harvested, Yield, and Production by State and United States, 1997 and Forecasted September 1, 1998

State	Area Harvested		Yield			Production	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
AL	385	320	25.0	25.0	25.0	9,625	8,000
AR	3,550	3,350	30.5	28.0	28.0	108,275	93,800
DE	219	215	29.0	29.0	26.0	6,351	5,590
FL ¹	38	35	26.0	23.0	23.0	988	805
GA	410	290	21.0	20.0	22.0	8,610	6,380
IL	9,950	10,650	43.0	45.0	48.0	427,850	511,200
IN	5,400	5,600	44.0	45.0	45.0	237,600	252,000
IA	10,400	10,450	46.5	47.0	50.0	483,600	522,500
KS	2,400	2,500	37.0	38.0	36.0	88,800	90,000
KY	1,280	1,230	34.5	36.0	35.0	44,160	43,050
LA	1,350	1,100	29.0	22.0	22.0	39,150	24,200
MD	525	460	28.0	29.0	26.0	14,700	11,960
MI	1,890	1,890	38.5	36.0	36.0	72,765	68,040
MN	6,700	6,900	39.0	39.0	40.0	261,300	276,000
MS	2,070	1,950	31.0	27.0	27.0	64,170	52,650
MO	4,850	5,100	36.5	38.0	38.0	177,025	193,800
NE	3,450	3,750	41.0	45.0	49.0	141,450	183,750
NJ ¹	132	118	30.0	30.0	30.0	3,960	3,540
NY ²		97		37.0	37.0		3,589
NC	1,330	1,425	29.0	27.0	26.0	38,570	37,050
ND	1,190	1,690	29.0	27.0	27.0	34,510	45,630
OH	4,490	4,490	44.0	44.0	44.0	197,560	197,560
OK ¹	320	380	30.0	23.0	23.0	9,600	8,740
PA ¹	365	390	39.0	40.0	40.0	14,235	15,600
SC	610	540	22.0	19.0	19.0	13,420	10,260
SD	3,450	3,550	35.0	36.0	38.0	120,750	134,900
TN	1,280	1,200	34.0	35.0	35.0	43,520	42,000
TX	400	370	28.0	25.0	25.0	11,200	9,250
VA	490	480	23.0	25.0	22.0	11,270	10,560
WI	960	1,050	44.0	42.0	44.0	42,240	46,200
US	69,884	71,570	39.0	39.5	40.6	2,727,254	2,908,604

¹ Estimates for current year carried forward from an earlier forecast.

² NY included beginning with the 1998 crop year.

U.S. Soybean Production 1989 - 1998



**Peanuts: Area Harvested, Yield, and Production by State
and United States, 1997 and Forecasted September 1, 1998**

State	Area Harvested		Yield			Production ¹	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
AL	193.0	196.0	1,930	1,900	2,000	372,490	392,000
FL	84.0	81.0	2,715	2,400	2,400	228,060	194,400
GA	519.0	533.0	2,570	2,450	2,500	1,333,830	1,332,500
NM	17.3	20.0	2,700	2,300	2,500	46,710	50,000
NC	121.0	125.0	2,720	2,950	2,850	329,120	356,250
OK	77.0	75.0	2,400	2,200	2,200	184,800	165,000
SC	10.5	10.5	2,900	2,200	2,100	30,450	22,050
TX ²	315.0	360.0	2,610	2,600	2,550	822,150	918,000
VA	74.0	75.0	2,560	2,670	2,650	189,440	198,750
US	1,410.8	1,475.5	2,507	2,442	2,459	3,537,050	3,628,950

¹ Estimates comprised of quota and non-quota peanuts.

² Texas 1998 planted area revised to 370,000 acres and U.S. to 1,503,000 acres.

**Cottonseed: Production, United States,
1996-97 and Forecasted September 1, 1998**

State	Production		
	1996	1997	1998 ¹
	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
US	7,143.5	6,934.6	5,085.0

¹ Based on a 3-year average lint-seed ratio.

**Cotton: Area Harvested, Yield, and Production by Type, State,
and United States, 1997 and Forecasted September 1, 1998**

Type and State	Area Harvested		Yield			Production ¹	
	1997	1998	1997	1998		1997	1998
				Aug 1	Sep 1		
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Bales ²</i>	<i>1,000 Bales ²</i>
Upland							
AL	442.0	455.0	597	550	600	550.0	569.0
AZ	324.0	249.0	1,255	1,214	1,157	847.0	600.0
AR	940.0	855.0	859	764	646	1,683.0	1,150.0
CA	875.0	650.0	1,202	1,001	997	2,191.0	1,350.0
FL ³	99.0	80.0	577	498	498	119.1	83.0
GA	1,425.0	1,300.0	646	569	572	1,919.0	1,550.0
KS ³	10.0	14.0	418	501	501	8.7	14.6
LA	625.0	540.0	757	711	640	986.0	720.0
MS	970.0	915.0	901	813	787	1,821.0	1,500.0
MO	375.0	330.0	723	727	625	565.0	430.0
NM ³	66.0	59.0	676	781	781	93.0	96.0
NC	665.0	695.0	671	640	640	930.0	927.0
OK	190.0	100.0	462	528	480	183.0	100.0
SC	285.0	280.0	691	550	540	410.0	315.0
TN	480.0	445.0	662	636	593	662.0	550.0
TX	5,150.0	3,300.0	479	451	436	5,140.0	3,000.0
VA ³	100.0	91.0	659	770	770	137.2	146.0
US	13,021.0	10,358.0	673	634	607	18,245.0	13,100.6
Amer-Pima							
AZ	22.0	15.0	912	886	832	41.8	26.0
CA	184.0	184.0	1,141	939	939	437.2	360.0
NM	11.0	10.5	641	686	731	14.7	16.0
TX	32.0	37.0	815	843	778	54.3	60.0
US	249.0	246.5	1,056	911	900	548.0	462.0
All							
AL	442.0	455.0	597	550	600	550.0	569.0
AZ	346.0	264.0	1,233	1,198	1,138	888.8	626.0
AR	940.0	855.0	859	764	646	1,683.0	1,150.0
CA	1,059.0	834.0	1,191	988	984	2,628.2	1,710.0
FL ³	99.0	80.0	577	498	498	119.1	83.0
GA	1,425.0	1,300.0	646	569	572	1,919.0	1,550.0
KS ³	10.0	14.0	418	501	501	8.7	14.6
LA	625.0	540.0	757	711	640	986.0	720.0
MS	970.0	915.0	901	813	787	1,821.0	1,500.0
MO	375.0	330.0	723	727	625	565.0	430.0
NM	77.0	69.5	671	767	774	107.7	112.0
NC	665.0	695.0	671	640	640	930.0	927.0
OK	190.0	100.0	462	528	480	183.0	100.0
SC	285.0	280.0	691	550	540	410.0	315.0
TN	480.0	445.0	662	636	593	662.0	550.0
TX	5,182.0	3,337.0	481	455	440	5,194.3	3,060.0
VA ³	100.0	91.0	659	770	770	137.2	146.0
US	13,270.0	10,604.5	680	640	614	18,793.0	13,562.6

¹ Production ginned and to be ginned.

² 480-Lb. net weight bales.

³ Estimates for current year carried forward from previous forecast.

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

Seasonal Group and State	Area Harvested		Yield		Production		
	1997	1998	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Cwt</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Winter ¹							
CA	6.6	7.0	240	220	1,425	1,584	1,540
FL	8.8	8.0	175	180	1,848	1,540	1,440
Total	15.4	15.0	203	199	3,273	3,124	2,980
Spring ¹							
AL	1.5	1.7	175	165	304	263	281
AZ	6.2	8.2	275	235	2,475	1,705	1,927
CA	20.7	18.9	400	335	7,538	8,280	6,332
FL	33.3	34.5	199	178	7,765	6,641	6,155
Hastings	24.5	24.5	210	190	6,325	5,145	4,655
Other FL	8.8	10.0	170	150	1,440	1,496	1,500
NC	16.5	17.0	200	185	3,230	3,300	3,145
TX	8.0	9.5	195	170	1,105	1,560	1,615
Total	86.2	89.8	252	217	22,417	21,749	19,455
Summer ²							
AL	5.9	5.5	150	130	1,005	885	715
CA	5.9	6.1	360	370	2,088	2,124	2,257
CO	7.6	8.2	340	350	3,381	2,584	2,870
DE	4.2	4.7	230	240	1,248	966	1,128
IL	4.6	5.6	325	290	1,650	1,495	1,624
IA ¹	1.3	1.1	210	190	315	273	209
MD ¹	3.4	4.6	280	260	559	952	1,196
MO	5.8	8.5	255	225	1,633	1,479	1,913
NE	4.3	4.4	390	365	1,485	1,677	1,606
NJ	2.2	2.2	270	230	663	594	506
NM	4.3	3.9	320	280	1,404	1,376	1,092
NC ¹	1.2	1.1	100	95	108	120	105
TX	7.7	7.4	245	380	2,280	1,887	2,812
VA	7.5	7.5	195	200	1,688	1,463	1,500
Total	65.9	70.8	271	276	19,507	17,875	19,533

See footnotes at end of table.

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Potatoes: Area Harvested, Yield, and Production by Seasonal Group, State, and United States, 1996-98 (continued)

Seasonal Group and State	Area Harvested		Yield		Production		
	1997	1998	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Cwt</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>
Fall ^{1 2 3}							
CA	10.5	10.3	400		4,600	4,200	
CO	76.9	75.6	325		29,175	24,993	
ID	398.0	403.0	353		142,800	140,314	
10 SW Co	27.0	27.0	470		11,900	12,690	
Other ID	371.0	376.0	344		130,900	127,624	
IN	4.9	4.9	270		1,352	1,323	
ME	71.0	62.0	270		21,175	19,170	
MA	2.8	2.7	270		676	756	
MI	47.5	48.5	300		13,800	14,250	
MN	73.0	77.0	280		24,600	20,440	
MT	10.4	10.6	320		3,213	3,328	
NE	19.3	20.0	390		4,402	7,527	
NV	6.9	6.9	430		3,160	2,967	
NM	6.3	6.2	420		2,560	2,646	
NY	28.0	29.5	275		7,980	7,700	
ND	105.0	125.0	205		28,820	21,525	
OH	5.0	4.8	235		1,275	1,175	
OR	53.5	55.4	508		30,124	27,161	
Malheur	10.9	11.9	440		5,320	4,796	
Other OR	42.6	43.5	525		24,804	22,365	
PA	14.5	14.5	220		4,208	3,190	
RI	0.8	0.7	270		192	216	
SD	4.2	4.6	250		1,344	1,050	
UT	3.1	2.7	295		1,176	915	
WA	152.0	152.0	580		94,990	88,160	
WI	83.5	81.0	355		31,590	29,643	
WY	0.5	0.5	280		224	140	
Total	1,177.6	1,198.4	359		453,436	422,789	
US	1,345.1	1,374.0	346		498,633	465,537	

¹ Estimates for current year carried forward from earlier forecast.

² 1997 revised.

³ Estimates for 1998 yield and production for fall potatoes will be published November 10, 1998.

**Potatoes: Area Planted by Seasonal Group,
State, and United States, 1997-98**

Seasonal Group and State	1997	1998	Seasonal Group and State	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>		<i>1,000 Acres</i>	<i>1,000 Acres</i>
Winter ¹			Fall ^{1 2}		
CA	6.6	7.0	CA	10.5	10.3
FL	9.0	8.5	CO	77.0	75.8
Total	15.6	15.5	ID	400.0	405.0
			10 SW Co	27.0	27.0
Spring ¹			Other ID	373.0	378.0
AL	1.6	1.8	IN	5.3	5.3
AZ	6.2	8.2	ME	71.0	63.0
CA	20.7	18.9	MA	2.8	2.7
FL	34.5	36.8	MI	48.0	50.0
Hastings	25.5	26.5	MN	77.0	82.0
Other FL	9.0	10.3	MT	10.4	10.6
NC	17.0	17.5	NE	19.6	20.2
TX	8.3	10.0	NV	7.0	7.0
Total	88.3	93.2	NM	6.3	6.2
			NY	28.5	30.0
Summer ²			ND	125.0	130.0
AL	6.0	5.6	OH	5.3	5.0
CA	5.9	6.2	OR	54.5	56.0
CO	7.8	8.4	Malheur Co	11.0	12.0
DE	4.3	4.7	Other OR	43.5	44.0
IL	4.8	5.8	PA	15.0	15.0
IA ¹	1.3	1.2	RI	0.8	0.7
MD ¹	3.4	4.6	SD	4.5	5.0
MO	6.4	9.1	UT	3.1	2.7
NE	4.4	4.5	WA	152.0	152.0
NJ	2.2	2.2	WI	84.0	83.0
NM	4.4	4.3	WY	0.5	0.5
NC ¹	1.2	1.1	Total	1,208.1	1,218.0
TX	8.5	8.2			
VA	8.0	8.5	US	1,380.6	1,401.1
Total	68.6	74.4			

¹ Estimates for current year carried forward from earlier forecast.

² 1997 revised.

**Tobacco: Area Harvested, Yield, and Production by State
and United States, 1996-97 and Forecasted September 1, 1998**

State	Area Harvested		Yield		Production		
	1997	1998	1997	1998	1996	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
CT ¹	2,270	2,620	1,586	1,647	3,795	3,600	4,315
FL	7,300	6,500	2,610	2,300	20,100	19,053	14,950
GA	43,000	42,000	2,075	2,000	113,620	89,225	84,000
IN	8,900	8,500	2,100	2,100	14,972	18,690	17,850
KY	230,500	236,400	2,162	2,176	395,542	498,328	514,330
MD	8,000	7,500	1,500	1,450	10,000	12,000	10,875
MA ¹	1,200	1,215	1,731	1,507	1,212	2,077	1,831
MO ¹	3,000	2,800	2,345	2,300	6,021	7,035	6,440
NC	317,400	264,600	2,304	1,953	585,542	731,419	516,880
OH	11,400	9,800	1,956	1,910	12,640	22,300	18,718
PA	7,600	7,200	2,021	1,955	15,464	15,360	14,076
SC	54,000	45,000	2,340	2,100	117,810	126,360	94,500
TN	59,480	63,580	1,922	1,980	109,888	114,292	125,868
VA	53,080	47,680	2,215	2,152	103,543	117,576	102,604
WV ¹	1,800	1,800	1,700	1,500	2,040	3,060	2,700
WI	2,550	2,300	2,231	2,052	5,162	5,690	4,720
US	811,480	749,495	2,201	2,048	1,517,351	1,786,065	1,534,657

¹ Estimates for current year carried forward from an earlier forecast.

**Tobacco: Area Harvested, Yield, and Production by Class, Type,
State, and United States, 1997 and Forecasted September 1, 1998**

Class and Type	Area Harvested		Yield		Production	
	1997	1998	1997	1998	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Class 1, Flue-cured						
Type 11, Old Belts						
NC	90,000	74,000	2,025	1,900	182,250	140,600
VA	41,000	35,000	2,315	2,200	94,915	77,000
US	131,000	109,000	2,116	1,996	277,165	217,600
Type 12, Eastern NC Belt						
NC	179,000	150,000	2,445	2,000	437,655	300,000
Type 13, NC Border & SC Belt						
NC	40,000	32,000	2,455	1,900	98,200	60,800
SC	54,000	45,000	2,340	2,100	126,360	94,500
US	94,000	77,000	2,389	2,017	224,560	155,300
Type 14, GA-FL Belt						
FL	7,300	6,500	2,610	2,300	19,053	14,950
GA	43,000	42,000	2,075	2,000	89,225	84,000
US	50,300	48,500	2,153	2,040	108,278	98,950
Total 11-14	454,300	384,500	2,306	2,007	1,047,658	771,850
Class 2, Fire-cured						
Type 21, VA Belt						
VA	1,200	1,600	1,640	1,500	1,968	2,400
Type 22, Eastern District						
KY	3,750	3,800	2,560	2,500	9,600	9,500
TN	7,400	7,400	2,480	2,500	18,352	18,500
US	11,150	11,200	2,507	2,500	27,952	28,000
Type 23, Western District						
KY	3,600	3,700	2,970	3,100	10,692	11,470
TN	600	600	2,750	2,750	1,650	1,650
US	4,200	4,300	2,939	3,051	12,342	13,120
Total 21-23	16,550	17,100	2,554	2,545	42,262	43,520
Class 3, Air-cured						
Class 3A, Light Air-cured						
Type 31, Burley						
IN	8,900	8,500	2,100	2,100	18,690	17,850
KY	220,000	225,000	2,140	2,150	470,800	483,750
MO ¹	3,000	2,800	2,345	2,300	7,035	6,440
NC	8,400	8,600	1,585	1,800	13,314	15,480
OH	11,400	9,800	1,960	1,910	22,300	18,718
TN	51,000	55,000	1,830	1,900	93,330	104,500
VA	10,800	11,000	1,905	2,100	20,574	23,100
WV ¹	1,800	1,800	1,700	1,500	3,060	2,700
US	315,300	322,500	2,059	2,085	649,103	672,538
Type 32, Southern MD Belt						
MD	8,000	7,500	1,500	1,450	12,000	10,875
PA	3,000	2,700	1,900	1,880	5,700	5,076
US	11,000	10,200	1,609	1,564	17,700	15,951
Total 31-32	326,300	332,700	2,044	2,069	666,803	688,489

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**Tobacco: Area Harvested, Yield, and Production by Class, Type, State,
and United States, 1997 and Forecasted September 1, 1998 (continued)**

Class and Type	Area Harvested		Yield		Production	
	1997	1998	1997	1998	1997	1998
	<i>Acres</i>	<i>Acres</i>	<i>Pounds</i>	<i>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	2,050	2,500	2,290	2,500	4,695	6,250
TN	480	580	2,000	2,100	960	1,218
US	2,530	3,080	2,235	2,425	5,655	7,468
Type 36, Green River						
Belt						
KY	1,100	1,400	2,310	2,400	2,541	3,360
Type 37, VA Sun-cured						
Belt						
VA	80	80	1,488	1,300	119	104
Total 35-37	3,710	4,560	2,241	2,397	8,315	10,932
Class 4, Cigar Filler						
Type 41, PA Seedleaf						
PA	4,600	4,500	2,100	2,000	9,660	9,000
Class 5, Cigar Binder						
Class 5A, CT Valley						
Binder						
Type 51, CT Valley						
Broadleaf						
CT ¹	1,230	1,325	1,730	1,800	2,128	2,385
MA ¹	780	875	1,850	1,665	1,443	1,457
US	2,010	2,200	1,777	1,746	3,571	3,842
Class 5B, WI Binder						
Type 54, Southern WI						
WI	1,800	1,600	2,330	2,250	4,194	3,600
Type 55, Northern WI						
WI	750	700	1,995	1,600	1,496	1,120
Total 54-55	2,550	2,300	2,231	2,052	5,690	4,720
Total 51-55	4,560	4,500	2,031	1,903	9,261	8,562
Class 6, Cigar Wrapper						
Type 61, CT Valley						
Shade-grown						
CT ¹	1,040	1,295	1,415	1,490	1,472	1,930
MA ¹	420	340	1,510	1,100	634	374
US	1,460	1,635	1,442	1,409	2,106	2,304
All Cigar Types						
Total 41-61	10,620	10,635	1,980	1,868	21,027	19,866
All Tobacco	811,480	749,495	2,201	2,048	1,786,065	1,534,657

¹ Estimates for current year carried forward from an earlier forecast.

**Oranges: Utilized Production by State and United States,
1996-97, 1997-98 and Forecasted September 1, 1998^{1 2 3}**

Crop and State	Utilized Production Boxes			Utilized Production Ton Equivalent		
	1996-97	1997-98	1998-99	1996-97	1997-98	1998-99
	<i>1,000 Boxes</i>	<i>1,000 Boxes</i>	<i>1,000 Boxes</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
Early Mid & Navel ⁴						
AZ	400	350		15	13	
CA	40,000	44,000	34,000	1,500	1,650	1,275
FL	134,200	140,000		6,039	6,300	
TX	1,300	1,350		55	57	
US	175,900	185,700		7,609	8,020	
Valencia						
AZ	600	650		23	25	
CA	24,000	30,000		900	1,125	
FL	92,000	104,000		4,140	4,680	
TX	120	175		5	7	
US	116,720	134,825		5,068	5,837	
All						
AZ	1,000	1,000		38	38	
CA	64,000	74,000		2,400	2,775	
FL	226,200	244,000		10,179	10,980	
TX	1,420	1,525		60	64	
US	292,620	320,525		12,677	13,857	

¹ 1996-97 and 1997-98 revised. Revised grapefruit and other citrus fruit totals will be released September 23, 1998, in "Citrus Fruits, 1998 Summary".

² The crop year begins with the bloom of the first year shown and ends with the completion of harvest the following year.

³ Net lbs. per box: AZ & CA-75, FL-90, TX-85.

⁴ Navel and miscellaneous varieties in AZ and CA. Early (including Navel) and midseason varieties in FL and TX. Small quantities of tangerines in TX.

**Sugarbeets: Area Harvested, Yield, and Production by State and
United States, 1996-97 and Forecasted September 1, 1998¹**

State	Area Harvested		Yield		Production		
	1997	1998	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
CA	99.0	100.0	30.0	29.0	2,419	2,970	2,900
CO	66.4	59.8	19.7	21.7	1,032	1,308	1,298
ID	197.0	203.0	26.4	25.3	4,563	5,210	5,136
MI	160.0	174.0	19.0	18.0	1,963	3,040	3,132
MN	446.0	462.0	18.5	19.4	7,971	8,251	8,963
MT ²	58.3	63.0	21.0	21.6	1,300	1,224	1,361
NE	60.3	45.9	16.8	19.5	913	1,013	895
NM	1.6		30.6		27	49	
ND ²	227.5	240.0	18.5	19.7	4,213	4,205	4,728
OH	0.9	1.0	19.0	18.0	86	17	18
OR	17.4	17.5	28.4	24.4	416	494	427
TX	15.0		18.0		242	270	
WA	18.0	36.3	33.1	33.5	461	595	1,216
WY	60.9	53.0	20.4	20.0	1,074	1,240	1,060
US	1,428.3	1,455.5	20.9	21.4	26,680	29,886	31,134

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

² Planted acres for MT and ND revised to 64,300 and 245,000 acres, respectively.

**Sugarcane for Sugar and Seed: Area Harvested, Yield, and Production
by State and United States, 1996-97 and Forecasted September 1, 1998**

State	Area Harvested		Yield ¹		Production ¹		
	1997	1998	1997	1998	1996	1997	1998
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>	<i>1,000 Tons</i>
FL	440.0	448.0	36.9	36.0	14,498	16,236	16,128
HI	34.2	34.0	88.0	82.0	3,639	3,009	2,788
LA	410.0	420.0	28.2	27.0	10,323	11,562	11,340
TX	29.8	37.0	30.3	27.5	1,002	902	1,018
US	914.0	939.0	34.7	33.3	29,462	31,709	31,274

¹ Net tons.

Papayas: Area and Fresh Production, by Month, Hawaii, 1997-98

Month	Area				Fresh Production	
	Total in Crop		Harvested		1997	1998
	1997	1998	1997	1998		
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Jul	5,280	3,665	2,325	2,450	2,845	3,005
Aug	5,350	3,645	2,350	2,400	2,705	2,740

**Nuts: Utilized Production, In-shell Basis, by Crop and State,
1996-97 and Forecasted September 1, 1998**

Crop and State	Utilized Production		
	1996	1997	1998
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Hazelnuts			
OR	18,400	46,850	16,450
WA	100	150	50
Total	18,500	47,000	16,500
Walnuts			
CA	208,000	269,000	220,000
	1,000 Pounds		
Pistachios			
CA	105,000	180,000	195,000

**Pecans: Utilized Production by Crop, State, and United States,
1996-97 and Forecasted September 1, 1998**

Crop and State	Utilized Production		
	1996	1997	1998
	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>
Improved Varieties ¹			
AL	9,000	7,000	6,000
AZ	17,000	17,500	17,500
AR	800	1,600	500
CA	1,300	2,500	1,600
FL	500	600	600
GA	86,000	81,000	50,000
LA	2,000	2,000	2,000
MS	1,300	2,600	1,800
NM	22,000	43,000	28,000
NC	425	900	1,400
OK	500	3,000	1,500
SC	1,800	2,600	500
TX	30,000	40,000	30,000
US	172,625	204,300	141,400
Native & Seedling			
AL	5,000	6,000	4,000
AR	400	3,000	200
FL	1,400	1,200	900
GA	14,000	24,000	10,000
KS	200	4,200	200
LA	14,000	10,000	8,000
MS	1,300	1,400	700
NC	375	600	1,100
OK	1,500	32,000	8,500
SC	700	1,400	200
TX	10,000	50,000	10,000
US	48,875	133,800	43,800
All Pecans			
AL	14,000	13,000	10,000
AZ	17,000	17,500	17,500
AR	1,200	4,600	700
CA	1,300	2,500	1,600
FL	1,900	1,800	1,500
GA	100,000	105,000	60,000
KS	200	4,200	200
LA	16,000	12,000	10,000
MS	2,600	4,000	2,500
NM	22,000	43,000	28,000
NC	800	1,500	2,500
OK	2,000	35,000	10,000
SC	2,500	4,000	700
TX	40,000	90,000	40,000
US	221,500	338,100	185,200

¹ Budded, grafted, or topworked varieties.

Crop Summary: Area Planted and Harvested, United States, 1997-98¹
(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	6,910.0	6,446.0	6,425.0	6,078.0
Corn for Grain ²	80,227.0	80,798.0	73,720.0	73,789.0
Corn for Silage			5,758.0	
Hay, All			60,815.0	59,819.0
Alfalfa			23,673.0	23,437.0
All Other			37,142.0	36,382.0
Oats	5,169.0	4,992.0	2,911.0	2,936.0
Rice	3,056.0	3,215.0	3,034.0	3,187.0
Rye	1,433.0	1,586.0	341.0	428.0
Sorghum for Grain ²	10,108.0	9,726.0	9,391.0	7,838.0
Sorghum for Silage			310.0	
Wheat, All	70,989.0	65,799.0	63,577.0	59,211.0
Winter	48,342.0	46,850.0	41,813.0	40,757.0
Durum	3,250.0	3,700.0	3,107.0	3,583.0
Other Spring	19,397.0	15,249.0	18,657.0	14,871.0
Oilseeds				
Canola	728.0	1,133.0	698.0	1,087.0
Cottonseed				
Flaxseed	146.0	335.0	135.0	322.0
Mustard Seed	74.4	124.0	72.8	121.0
Peanuts ³	1,431.0	1,503.0	1,410.8	1,475.5
Rapeseed	1.7	2.0	1.5	1.9
Safflower	249.0	296.0	235.0	282.0
Soybeans for Beans	70,850.0	72,690.0	69,884.0	71,570.0
Sunflower	2,949.0	3,420.0	2,852.0	3,307.0
Cotton, Tobacco & Sugar Crops				
Cotton, All	13,808.0	12,865.5	13,270.0	10,604.5
Upland	13,558.0	12,552.0	13,021.0	10,358.0
Amer-Pima	250.0	313.5	249.0	246.5
Sugarbeets	1,459.3	1,495.2	1,428.3	1,455.5
Sugarcane			914.0	939.0
Tobacco			811.5	749.5
Dry Beans, Peas & Lentils				
Austrian Winter Peas	8.1		7.6	
Dry Edible Beans	1,851.8	2,024.0	1,720.2	1,903.9
Dry Edible Peas	293.6		276.6	
Lentils	181.0		172.0	
Wrinkled Seed Peas				
Potatoes & Misc.				
Coffee (HI)			5.6	
Ginger Root (HI)			0.3	0.4
Hops			43.3	36.6
Peppermint Oil			136.3	
Potatoes, All	1,380.6	1,401.1	1,345.1	1,374.0
Winter	15.6	15.5	15.4	15.0
Spring	88.3	93.2	86.2	89.8
Summer	68.6	74.4	65.9	70.8
Fall	1,208.1	1,218.0	1,177.6	1,198.4
Spearmint Oil			24.5	
Sweet Potatoes	86.7	86.1	83.3	83.2
Taro (HI) ⁴			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 1998 area planted revised. ⁴ 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	58.3	61.3	374,478	372,379
Corn for Grain	"	127.0	132.0	9,365,574	9,737,949
Corn for Silage	Ton	16.0		91,903	
Hay, All	"	2.50	2.48	152,120	148,287
Alfalfa	"	3.35	3.43	79,242	80,290
All Other	"	1.96	1.87	72,878	67,997
Oats	Bu	60.5	60.4	176,104	177,211
Rice ²	Cwt	5,896	5,685	178,896	181,170
Rye	Bu	26.1		8,912	
Sorghum for Grain	"	69.5	67.5	653,106	529,371
Sorghum for Silage	Ton	12.5		3,885	
Wheat, All	Bu	39.7	43.3	2,526,552	2,564,769
Winter	"	45.0	47.0	1,882,609	1,914,359
Durum	"	27.7	36.8	86,193	131,694
Other Spring	"	29.9	34.9	557,750	518,716
Oilseeds					
Canola	Lb	1,310		914,385	
Cottonseed	Ton			6,935	5,085
Flaxseed	Bu	16.1		2,171	
Mustard Seed	Lb	816		59,405	
Peanuts	"	2,507	2,459	3,537,050	3,628,950
Rapeseed	"	1,300		1,950	
Safflower	"	1,830		430,050	
Soybeans for Beans	Bu	39.0	40.6	2,727,254	2,908,604
Sunflower	Lb	1,320		3,763,428	
Cotton, Tobacco & Sugar Crops					
Cotton, All ²	Bale	680	614.0	18,793.0	13,562.6
Upland ²	"	673	607	18,245.0	13,100.6
Amer-Pima ²	"	1,056	900	548.0	462.0
Sugarbeets	Ton	20.9	21.4	29,886	31,134
Sugarcane	"	34.7	33.3	31,709	31,274
Tobacco	Lb	2,201	2,048	1,786,065	1,534,657
Dry Beans, Peas & Lentils					
Austrian Winter Peas ²	Cwt	1,513		115	
Dry Edible Beans ²	"	1,695	1,570	29,156	29,886
Dry Edible Peas ²	"	2,103		5,816	
Lentils ²	"	1,390		2,391	
Wrinkled Seed Peas	"			682	
Potatoes & Misc.					
Coffee (HI)	Lb	1,680		9,400	
Ginger Root (HI)	"	44,000	50,000	12,100	18,000
Hops	"	1,729	1,799	74,872.1	65,913.0
Peppermint Oil	"	75		10,256	
Potatoes, All	Cwt	346		465,537	
Winter	"	203	199	3,124	2,980
Spring	"	252	217	21,749	19,455
Summer	"	271	276	17,875	19,533
Fall	"	359		422,789	
Spearmint Oil	Lb	98		2,403	
Sweet Potatoes	Cwt	162		13,512	
Taro (HI) ³	Lb			5,500	

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.

Fruits and Nuts Production, United States, 1996-98
(Domestic Units)¹

Crop	Unit	Production		
		1996	1997	1998
		<i>1,000</i>	<i>1,000</i>	<i>1,000</i>
Citrus ²				
Grapefruit	Ton	2,718	2,888	2,626
K-Early Citrus (FL)	"	7	7	2
Lemons	"	992	859	935
Oranges	"	11,426	12,677	13,857
Tangelos (FL)	"	110	178	128
Tangerines	"	349	418	360
Temples (FL)	"	97	108	101
Non-Citrus				
Apples	Lb	10,392.0	10,386.1	11,321.9
Apricots	Ton	79.3	138.0	130.2
Bananas (HI)	Lb	13,000.0	13,700.0	
Grapes	Ton	5,554.3	7,282.4	6,232.9
Olives (CA)	"	166.0	104.0	95.0
Papayas (HI)	Lb	41,800.0	38,800.0	
Peaches	"	2,116.3	2,651.1	2,420.0
Pears	Ton	820.8	1,044.1	918.3
Prunes, Dried (CA)	"	223.0	214.0	170.0
Prunes & Plums (Ex CA)	"	20.0	29.0	28.3
Nuts & Misc.				
Almonds (CA)	Lb	510,000	757,000	540,000
Hazelnuts	Ton	18.5	47.0	16.5
Pecans	Lb	221,500	338,100	185,200
Pistachios (CA)	"	105,000	180,000	195,000
Walnuts (CA)	Ton	208.0	269.0	220.0
Maple Syrup	Gal	1,567	1,298	1,159

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 years are 1995-96, 1996-97, and 1997-98.

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	2,796,410	2,608,630	2,600,130	2,459,710
Corn for Grain ²	32,467,060	32,698,140	29,833,750	29,861,670
Corn for Silage			2,330,210	
Hay, All ³			24,611,220	
Alfalfa			9,580,230	9,484,720
All Other			15,031,000	14,723,430
Oats	2,091,840	2,020,210	1,178,050	1,188,170
Rice	1,236,730	1,301,080	1,227,830	1,289,750
Rye	579,920	641,840	138,000	173,210
Sorghum for Grain ²	4,090,610	3,936,010	3,800,440	3,171,960
Sorghum for Silage			125,450	
Wheat, All ³	28,728,540	26,628,200	25,728,980	23,962,100
Winter	19,563,520	18,959,730	16,921,300	16,493,950
Durum	1,315,240	1,497,350	1,257,370	1,450,000
Other Spring	7,849,770	6,171,120	7,550,300	6,018,140
Oilseeds				
Canola	294,610	458,510	282,470	439,900
Cottonseed				
Flaxseed	59,080	135,570	54,630	130,310
Mustard Seed	30,110	50,180	29,460	48,970
Peanuts	579,110	608,250	570,940	597,120
Rapeseed	690	810	610	770
Safflower	100,770	119,790	95,100	114,120
Soybeans for Beans	28,672,290	29,416,920	28,281,360	28,963,660
Sunflower	1,193,430	1,384,040	1,154,180	1,338,310
Cotton, Tobacco & Sugar Crops				
Cotton, All ³	5,587,960	5,206,540	5,370,240	4,291,540
Upland	5,486,790	5,079,670	5,269,470	4,191,780
Amer-Pima	101,170	126,870	100,770	99,760
Sugarbeets	590,560	605,090	578,020	589,030
Sugarcane			369,890	380,000
Tobacco			328,400	303,310
Dry Beans, Peas & Lentils				
Austrian Winter Peas	3,280		3,080	
Dry Edible Beans	749,400	819,090	696,150	770,490
Dry Edible Peas	118,820		111,940	
Lentils	73,250		69,610	
Wrinkled Seed Peas				
Potatoes & Misc.				
Coffee (HI)			2,270	
Ginger Root (HI)			110	150
Hops			17,520	14,830
Peppermint Oil			55,160	
Potatoes, All ³	558,720	567,010	544,350	556,040
Winter	6,310	6,270	6,230	6,070
Spring	35,730	37,720	34,880	36,340
Summer	27,760	30,110	26,670	28,650
Fall	488,910	492,910	476,560	484,980
Spearmint Oil			9,910	
Sweet Potatoes	35,090	34,840	33,710	33,670
Taro (HI) ⁴			180	

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	3.14	3.30	8,153,300	8,107,600
Corn for Grain	7.97	8.28	237,896,540	247,355,300
Corn for Silage	35.78		83,373,000	
Hay, All ²	5.61	5.56	138,000,940	134,523,700
Alfalfa	7.50	7.68	71,887,130	72,837,860
All Other	4.40	4.19	66,113,810	61,685,840
Oats	2.17	2.16	2,556,140	2,572,210
Rice	6.61	6.37	8,114,590	8,217,730
Rye	1.64		226,380	
Sorghum for Grain	4.37	4.24	16,589,660	13,446,640
Sorghum for Silage	28.09		3,524,410	
Wheat, All ²	2.67	2.91	68,761,480	69,801,570
Winter	3.03	3.16	51,236,220	52,100,310
Durum	1.87	2.47	2,345,790	3,584,120
Other Spring	2.01	2.35	15,179,470	14,117,140
Oilseeds				
Canola	1.47		414,760	
Cottonseed			6,290,960	4,613,030
Flaxseed	1.01		55,150	
Mustard Seed	0.91		26,950	
Peanuts	2.81	2.76	1,604,380	1,646,060
Rapeseed	1.46		880	
Safflower	2.05		195,070	
Soybeans for Beans	2.62	2.73	74,223,690	79,159,230
Sunflower	1.48		1,707,060	
Cotton, Tobacco & Sugar Crops				
Cotton, All ²	0.76	0.69	4,091,690	2,952,910
Upland	0.75	0.68	3,972,380	2,852,320
Amer-Pima	1.18	1.01	119,310	100,590
Sugarbeets	46.91	47.95	27,112,120	28,244,290
Sugarcane	77.77	74.66	28,765,920	28,371,300
Tobacco	2.47	2.30	810,150	696,110
Dry Beans, Peas & Lentils				
Austrian Winter Peas	1.70		5,220	
Dry Edible Beans	1.90	1.76	1,322,490	1,355,610
Dry Edible Peas	2.36		263,810	
Lentils	1.56		108,450	
Wrinkled Seed Peas			30,940	
Potatoes & Misc.				
Coffee (HI)	1.88		4,260	
Ginger Root (HI)	49.32	56.04	5,490	8,160
Hops	1.94	2.02	33,960	29,900
Peppermint Oil	0.08		4,650	
Potatoes, All ²	38.79		21,116,400	
Winter	22.74	22.27	141,700	135,170
Spring	28.28	24.28	986,520	882,460
Summer	30.40	30.92	810,800	886,000
Fall	40.24		19,177,390	
Spearmint Oil	0.11		1,090	
Sweet Potatoes	18.18		612,890	
Taro (HI) ³			2,490	

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.

Fruits and Nuts Production, United States, 1996-98
(Metric Units) ¹

Crop	Production		
	1996	1997	1998
	<i>Metric tons</i>	<i>Metric tons</i>	<i>Metric tons</i>
Citrus ²			
Grapefruit	2,465,730	2,619,950	2,382,270
K-Early Citrus (FL)	6,350	6,350	1,810
Lemons	899,930	779,270	848,220
Oranges	10,365,490	11,500,380	12,570,860
Tangelos (FL)	99,790	161,480	116,120
Tangerines	316,610	379,200	326,590
Temples (FL)	88,000	97,980	91,630
Non-Citrus			
Apples	4,710	4,710	5,140
Apricots	71,940	125,190	118,120
Bananas (HI)	5,900	6,210	
Grapes	5,038,780	6,606,480	5,654,350
Olives (CA)	150,590	94,350	86,180
Papayas (HI)	18,960	17,600	
Peaches	960	1,200	1,100
Pears	744,570	947,190	833,100
Prunes, Dried (CA)	202,300	194,140	154,220
Prunes & Plums (Ex CA)	18,140	26,310	25,670
Nuts & Misc.			
Almonds (CA)	231,330	343,370	244,940
Hazelnuts	16,780	42,640	14,970
Pecans	100,470	153,360	84,010
Pistachios (CA)	47,630	81,650	88,450
Walnuts (CA)	188,690	244,030	199,580
Maple Syrup	7,830	6,490	5,790

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 years are 1995-96, 1996-97, and 1997-98.

Corn for Grain: Plant Population

The National Agricultural Statistics Service is conducting objective yield surveys in 7 corn producing states during 1998. Randomly selected plots in corn for grain fields are visited monthly from August through harvest to obtain specific counts and measurements. Data in this table are rounded actual field counts from this survey.

**Corn for Grain: Plant Population per Acre,
Selected States, 1994-98**

State	Month	1994	1995	1996	1997	1998
		<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
IL	Sep	23,300	24,000	24,350	25,000	25,550
	Nov	23,200	23,650	24,200	24,900	
IN	Sep	22,800	23,900	23,550	23,700	24,350
	Nov	22,850	24,000	23,500	23,800	
IA	Sep	24,000	24,800	25,000	25,700	25,700
	Nov	23,950	24,650	24,950	25,500	
MN	Sep	26,100	26,400	26,500	26,300	27,750
	Nov	26,000	26,350	26,600	26,600	
NE	Sep	21,900	22,600	22,750	22,850	23,350
	Nov	21,700	22,500	22,700	22,850	
OH	Sep	22,800	23,400	23,100	23,450	25,350
	Nov	22,900	23,300	22,750	23,500	
WI	Sep	24,100	24,600	24,800	24,750	26,600
	Nov	23,600	24,000	24,900	24,800	

All Spring Wheat: Head Population

The National Agricultural Statistics Service is conducting objective yield surveys in three spring wheat producing states during 1998. Randomly selected plots in wheat 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. The final number of heads is determined when the plots are harvested at maturity. These data will be published in January.

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

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

Soybeans: Pods with Beans

The National Agricultural Statistics Service is conducting 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, 1994-98¹**

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

¹ Based on pod counts in plots selected for objective yield samples.

² Not available due to plant immaturity.

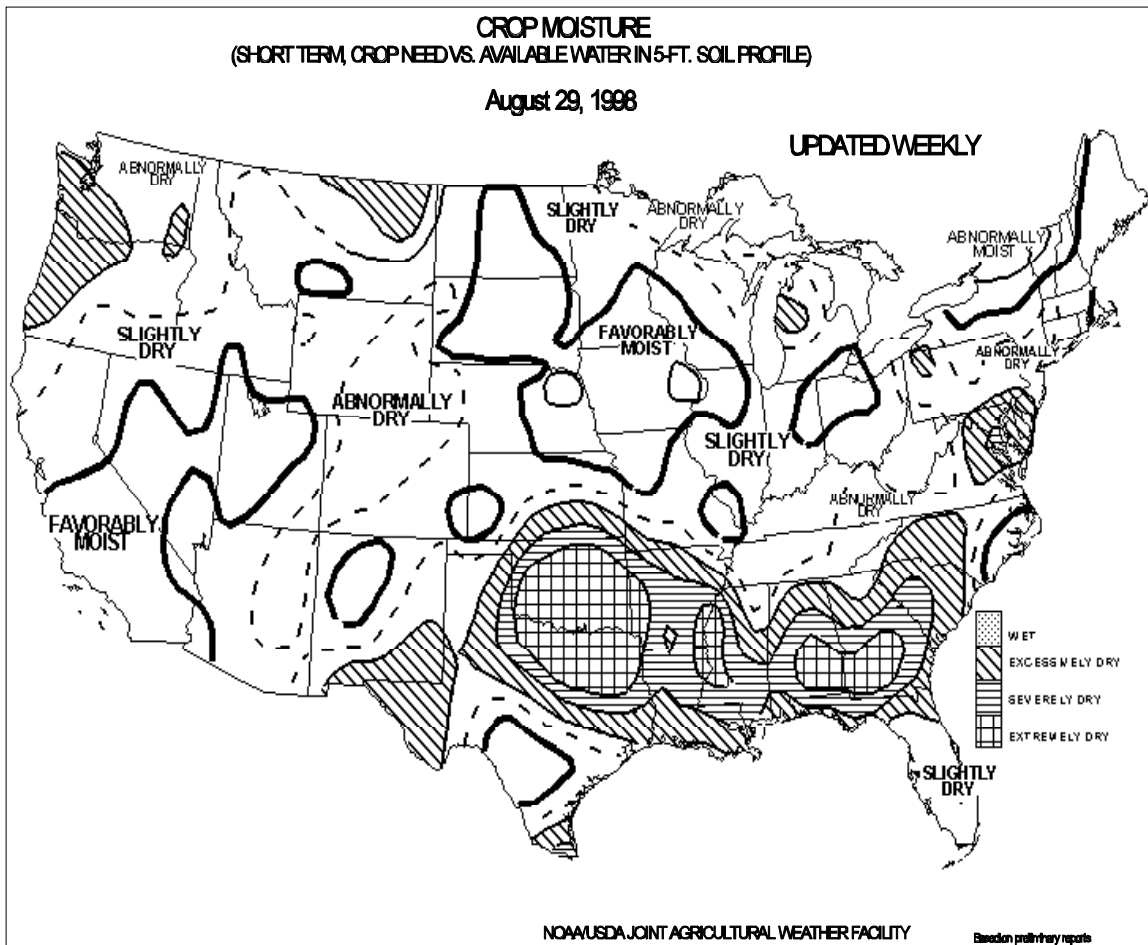
Cotton: Cumulative Boll Counts

The National Agricultural Statistics Service is conducting objective yield surveys in 5 cotton producing states during 1998. Randomly selected plots of cotton 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.

**Cotton: Cumulative Boll Counts, September 1994-98, and
November and Final, 1994-97¹**

State	Month	1994	1995	1996	1997	1998
		<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
AR	Sep	1,019	850	857	975	637
	Nov	813	689	741	810	
	Final	812	689	741	811	
CA	Sep	828	751	707	701	755
	Nov	805	682	748	697	
	Final	806	680	744	697	
LA	Sep	808	679	665	639	694
	Nov	747	615	607	643	
	Final	748	615	607	643	
MS	Sep	864	682	816	908	835
	Nov	761	607	731	835	
	Final	760	607	729	833	
TX	Sep	515	423	383	500	498
	Nov	484	409	498	468	
	Final	486	415	498	458	

¹ Includes small bolls (less than one inch in diameter), large unopened bolls (at least one inch in diameter), open bolls, partially opened bolls, and burrs, per 40 feet of row. In November, excludes small bolls.

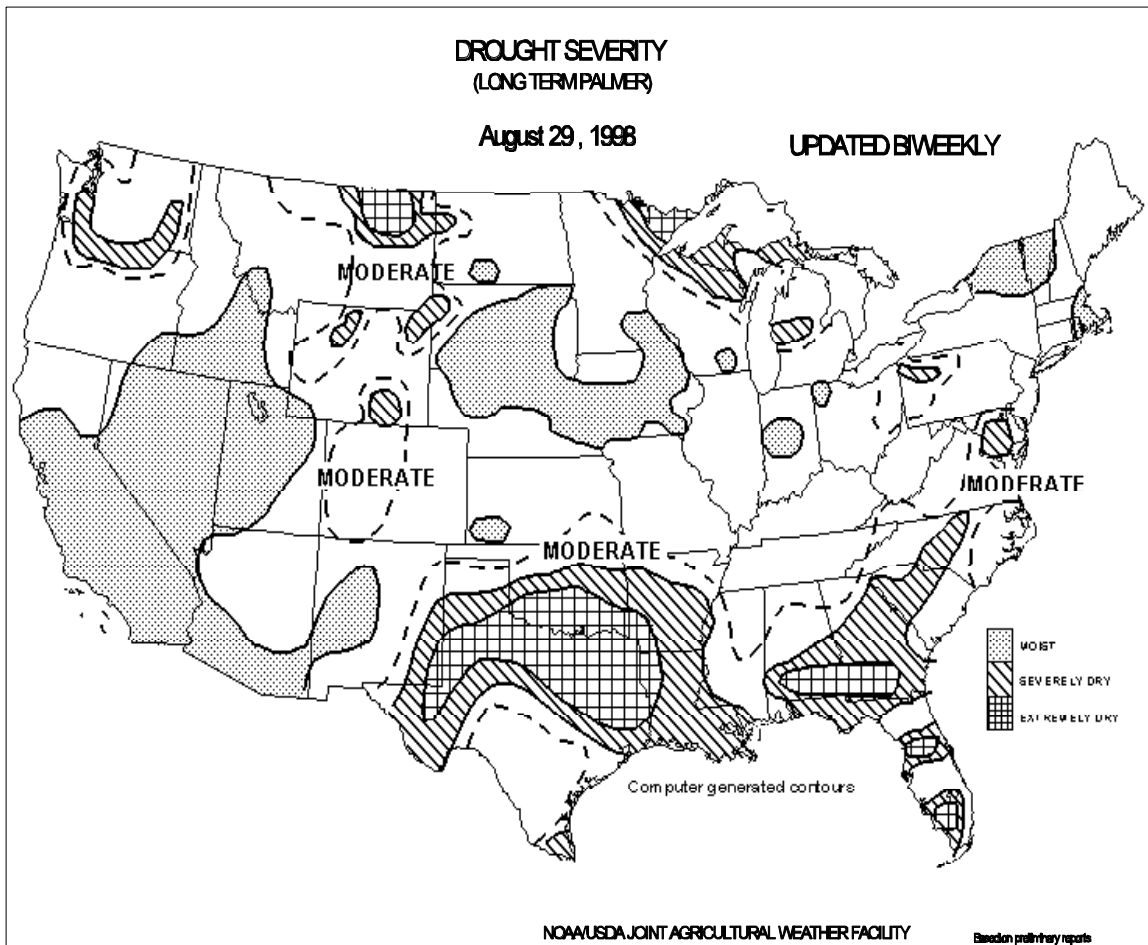


Crop Moisture

Depicts short term (up to about 4 weeks) abnormal dryness or wetness affecting Agriculture, responds rapidly, can change considerably week to week, and indicates normal conditions at the beginning and end of the growing season.

Uses...applicable in measuring the short term, week-to-week, status of dryness or wetness affecting warm season crops and field operations.

Limitations...may not be applicable to germination and shallow rooted crops which are unable to extract the deep or subsoil moisture from a 5-foot profile, or for cool season crops growing when temperatures are averaging below about 55 degrees fahrenheit. It is not generally indicative of the long term (months, years) drought or wet spells which are depicted by the drought severity index.



Drought Severity

Drought severity index (Palmer): Depicts prolonged (months, years) abnormal dryness or wetness; responds slowly; changes little from week to week; and reflects long term moisture runoff, recharge, and deep percolation, as well as evapotranspiration.

Uses...applicable in measuring disruptive effects of prolonged dryness or wetness on water sensitive economies; designating disaster areas of drought or wetness and reflecting the general long-term status of water supplies in aquifers, reservoirs, and streams.

Limitations...is not generally indicative of short-term (few weeks) status of drought or wetness such as frequently affects crops and field operations (this is indicated by the crop moisture index).

August Weather Summary: After a quiet Atlantic hurricane season through mid-August, Tropical Storm Charley and Hurricane Bonnie left imprints on southern Texas and the eastern Mid-Atlantic region, respectively. Away from Charley's influence, however, drought stretched into a sixth month across parts of the South-Central States, particularly in parts of northern Texas and southern Oklahoma. Pockets of short-term dryness also began to develop as far north as Kansas. Frequent rains and moderate temperatures aided filling corn and soybeans across the Midwest, but unfavorably dry weather prevailed in parts of the Mid-Atlantic region for a second consecutive month. Locally heavy rainfall soaked portions of the northern Plains and upper Midwest, but hot, dry weather dominated the West.

Monthly temperatures ranged from 2 to 5 degrees F above normal in the northern Plains and Northwest, and were generally 1 to 4 degrees F above normal in the drought-stricken portions of the South Central States. Temperatures were within 2 degrees F of normal throughout the Midwest and Southeast, but as much as 5 degrees F above normal in California and the Southwest.

Bonnie became a hurricane on the morning of August 22 and neared the North Carolina coast 4 days later. After stalling near Cape Fear, Bonnie drifted inland just northeast of Wilmington, NC on August 27. Sustained winds were 115 mph prior to landfall. After weakening to tropical-storm force, Bonnie re-emerged over the Atlantic near Kitty Hawk, NC, briefly regaining hurricane intensity (75 mph winds) and battering southeastern Virginia. Storm-total rainfall topped 10 inches in a small area near Bonnie's landfall, including 11.31 inches in Jacksonville, NC.

Tropical Storm Charley formed on August 21, reaching the Texas coast near Port Aransas the next morning. Sustained winds briefly reached 60 mph just prior to landfall. Heavy rainfall spread westward through southern Texas for the next several days. On August 23, nearly a year's worth of rain (17.03 inches, or 93 percent of their normal annual total) saturated Del Rio, TX, causing extensive flooding, en route to a monthly total of 20.93 inches. As a result, Del Rio's records for single-day (8.79 inches on June 13, 1935), August (6.10 inches in 1971), and monthly precipitation (15.79 inches in September 1964) were shattered. Ironically, Del Rio's rainfall during the first 8½ month of 1998 was just 2.89 inches, or 27 percent of normal, and was accompanied by 69 days of 100-degree heat, breaking their 1951 record by 1 day.

Despite the flooding in southern Texas, Charley's rains eased long-term drought. Monthly totals of 7.78 inches (306 percent of normal) in San Antonio and 4.06 inches (123 percent) in Corpus Christi accounted for 42 and 37 percent of year-to-date rainfalls, respectively. Nevertheless, hot weather early in the month propelled San Antonio to a record-setting 36th day of triple-digit heat this year, eclipsing their 1948 standard by 3 days. Corpus Christi, TX posted a record-setting 41 consecutive days (July 5 - August 14) with highs at or above 95 degrees F. A northern Texas heat wave temporarily broke on August 4, ending 29-day streaks of 100-degree weather in Dallas-Ft. Worth and Waco. By month's end, however, the total number of days this year with highs at or above 100 degrees F reached 51 in Dallas-Ft. Worth and 58 in Waco, approaching 1980 records (69 and 63 days, respectively).

The summer (June-August) of 1998 was the hottest on record in Brownsville (87.0 degrees F), breaking their 1980 record. In Florida, Tampa also marked their hottest summer (84.2 degrees F), breaking a record that had stood since 1887. It was the second-hottest summer in locations such as Shreveport, LA (behind 1881) and Dallas-Ft. Worth (behind 1980). Between June 16 and August 31, a 77-day span, Dallas-Ft. Worth's highs averaged 100.0 degrees F, while their rainfall totaled 0.46 inches. In addition, their April-August rainfall totaled 5.84 inches (37 percent of normal), second only to a 3.42-inch total during the same period in 1934.

In contrast, pockets of persistent wetness farther north left Burlington, VT with their wettest summer on record (24.77 inches, breaking an 1892 mark), and provided Omaha, NE with their second-wettest summer (21.33 inches; 2.77 inches below the 1993 standard). During August, however, dryness persisted or developed in a few areas of the East and lower Midwest. August rainfall was the lowest on record in Lexington, KY (0.29 inches, or 7 percent of normal), and at Virginia's Dulles Airport (0.45 inches; 11 percent).

August featured about 300 daily-record highs nationwide, nearly half of which occurred across the West and Southeast during the final 10 days of the month. In California, August high-temperature records were tied or broken in Paso Robles (114 degrees F on August 3) and downtown Sacramento (111 degrees F on August 4). Sacramento's highs reached triple digits on 16 days during the month, breaking an August 1996 record. August average-temperature records were established at locations such as downtown Sacramento (80.7 degrees F) and Reno, NV (74.9 degrees F).

Drier-than-normal weather accompanied the heat throughout the West. In Montana, Butte experienced below-normal monthly precipitation (0.53 inches, or 40 percent of normal) for the first time this year. Several sites in the Northwest that typically collect more than 1 inch of rain during August, including Olympia, WA, Portland, OR, and Eugene, OR, received no measurable rainfall during the month. On the northern Plains, however, August-record rainfall (9.29 inches, or 540 percent of normal) soaked Bismarck, ND, 4.64 inches of which fell in a 24-hour period on August 21-22. Earlier in the month, more than 8 inches of rain pelted parts of southeastern Wisconsin on August 6-7.

Late in the month, heat re-intensified across the West and the Southeast. On August 27-29, highs reached 100 degrees F in Jackson, MS for the first time on 3 consecutive days since 1990. On the 31st, maxima soared to 113 degrees F in Indio, CA and 100 degrees F in Augusta, GA.

General Crop Comments: Mild temperatures and ample rainfall early in the month promoted rapid corn and soybean development in many parts of the Corn Belt. Varying temperature and precipitation patterns limited insect populations and disease outbreaks. However, uneven growth and yellowing due to nitrogen deficiency, while limited to areas with excessive rainfall, 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. Heat and excessive dryness stressed corn and soybeans in parts of the Great Lakes region for most of the month.

Virtually all cotton fields in the southern Great Plains and Southeast had progressed into the boll setting stage by mid-month, with bolls 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 for early maturing crops. Later 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 activities were 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, with only fields in the northern Great Plains and Pacific Northwest remaining unharvested as the 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, continued ahead of normal as the month progressed, and finished well before the end of the month in most areas of the Corn Belt.

Above-normal temperatures in California promoted crop development and improved conditions, but cotton and rice development continued to lag well behind normal. As the month ended, cotton bolls were just beginning to open compared to the normal pace of 36 percent.

Corn: Acreage harvested and to be harvested for grain is forecast at 73.8 million acres, unchanged from last month and virtually unchanged from 1997. The September 1 Corn Objective Yield data indicate a record level stalk count for the seven objective yield States (Illinois, Indiana, Iowa, Minnesota, Nebraska, Ohio, and Wisconsin). The September forecasted ears per acre are the highest on record, and if realized, would exceed the previous record final ears per acre set in 1997. Ear measurements from the sample plots indicate a length slightly greater than last year and the average. As of August 30, 65 percent of the acreage was reported dented in the 17 major States. This compares with 39 percent last year and 40 percent for the 5 year average. Corn rated in the good to excellent condition totaled 69 percent compared to 62 percent for a year ago.

In Iowa, forecasted stalk populations are at record levels and ear populations are equal to record levels when compared to final counts. Ear length is slightly above the average but equal to 1997. Seventy-one percent of the corn was dented as of August 30, compared to 39 percent in 1997 and the average of 34 percent. Corn condition was 69 percent good to excellent.

Forecasted stalk and ear counts are at a record high level for Illinois when compared to final levels. Ear length is above both last year and average. Sixty-three percent of the corn was dented, compared to 50 percent last year and 47 percent for the average. Sixty-five percent of the corn was rated in good to excellent condition.

Nebraska and Ohio stalk and ear counts from objective yield data indicate record high levels. Ear length in both States is the same as 1997 but above average. Corn dented was well ahead of the average in both Nebraska and Ohio. Corn dented in Nebraska was 71 percent by August 30, compared to 38 percent for 1997 and the average of 39 percent. Ohio corn was 41 percent dented, compared to 16 percent for last year and the average of 31 percent. In Nebraska 85 percent of the corn crop was rated in good to excellent condition. In Ohio, the crop rated 70 percent in those two categories.

In Minnesota, forecasted stalk and ear counts are at record levels. Ear length is above both last year and the average. The corn dented in Minnesota was at 74 percent, compared to 22 percent for last year and the average of 24 percent. The majority (75 percent) of corn in Minnesota was rated in good to excellent condition.

Forecasted stalk and ear counts in Indiana and Wisconsin are at record levels. Ear length is less than both last year and the average in Wisconsin. In Indiana, ear length is above both last year and the average. Fifty-eight percent of the corn in Indiana was dented, compared to 34 percent in 1997 and the average of 40 percent. In Wisconsin, 49 percent of the corn was dented compared, to 7 percent in 1997 and the average of 21 percent. The majority (63 percent) of corn in Indiana was rated in good to excellent condition. In Wisconsin 71 percent of the corn was rated in good to excellent condition.

Sorghum for Grain: Production is forecast at 529 million bushels, 770 thousand bushels above the August forecast but 19 percent below the 1997 total. Area harvested and to be harvested was unchanged from August at 7.84 million acres, down 17 percent from the previous year. The forecasted yield, at 67.5 bushels per acre, was up 0.1 bushels from last month but 2 bushels per acre below 1997.

From the August report, Nebraska is the only State forecasting a higher yield, up 3 bushels to 98 bushels per acre. Arkansas and New Mexico yield forecasts are down 5 bushels at 62 and 60 bushels per acre, respectively. Mississippi, at 65 bushels per acre, is down 10 bushels from the previous forecast. All other States remained unchanged from the August forecast. As of the week ending September 6, the 12 major States reported 81 percent of the crop is coloring and 37 percent is mature. These are well ahead of the 5-year averages of 65 percent and 30 percent, respectively.

Barley: Barley production for 1998 is forecast at 372 million bushels, down slightly from both August 1998 and the 1997 final production. Yields are expected to average 61.3 bushels per acre, a decrease of 0.3 bushels from August but still 3.0 bushels higher than last year. Area harvested and to be harvested, at 6.08 million acres, remained unchanged from August but is 5 percent below the 6.43 million acres harvested in 1997.

Yield remained unchanged from August in eight of the eleven September forecast States but declined in Idaho, South Dakota, and Utah. Favorable weather during August pushed harvest progress ahead of normal in most of the major producing States. As of August 30, 91 percent of the crop had been harvested, compared with 64 percent normally harvested at this time. Harvest was winding down in North Dakota, South Dakota, and Washington.

Durum Wheat: Grain area is unchanged from the last forecast at 3.58 million acres. Yield prospects improved in Minnesota and South Dakota. The North Dakota Durum crop developed ahead of the 5-year average throughout August; harvest was 56 percent complete on August 30. Average harvest progress is 25 percent. North Dakota's Durum objective yield survey head count forecast is well above average. The forecast head weight is improved from a month ago, but still lower than average.

Other Spring Wheat: Harvested area for 1998 is unchanged from last month at 14.9 million acres, down 20 percent from last year. As of August 30, harvest was progressing well ahead of average in all major producing states.

Idaho harvested yields are a bit lower than were expected last month. Washington's average yield is also down; light test weights have been reported. Objective Yield survey data again shows plant populations at above average levels in Minnesota, Montana, and North Dakota. Head weight forecasts are up from August in all states.

Rice: Rice production is forecast at 181 million cwt, up 2 percent from August 1 and 1 percent above 1997. This production level, if realized, would be the third highest production on record. Area for harvest is expected to total 3.19 million acres, unchanged from August 1 and 5 percent above last year. Yields are expected to average 5,685 pounds per acre, up 109 pounds from August 1 but down 211 pounds from 1997. Yield prospects in Mississippi, Missouri, and Texas remained unchanged from a month ago.

The Arkansas harvest was on schedule, while Texas was 22 percent ahead of the 5-year average. California harvest has not begun. The crop development in California was delayed slightly due to cold wet spring weather. Harvest is expected to begin two to three weeks later than normal. As of August 30, Arkansas crop development was slightly behind normal and was rated 61 percent good to excellent. The Louisiana harvest was 77 percent complete, and

yields are better than earlier expectations. The crop condition in Mississippi and Texas rated mostly good to fair.

Soybeans: Growers expect to harvest 71.6 million acres of soybeans, up 2 percent from 1997 and unchanged from the August 1998 forecast.

As of September 1, the soybeans crop was rated mostly in fair to excellent condition. Conditions in the Corn Belt States during August varied from district to district, but were generally more favorable during the two first weeks of August when soil moisture supplies were more plentiful. Drier conditions were more prevalent the last two weeks of August, but many areas did get beneficial showers and storms. Some signs of isolated disease problems such as sudden death syndrome, brown stem rot and white mold were reported in areas of the Eastern Corn Belt. In many of the Southern and Mid-Atlantic states the crop was not doing as well as hot and dry conditions have persisted for much of the growing season.

Hot sunny weather in many states helped to advance the crop maturity. As of September 7, 98 percent of the soybeans crop had already set pods, 1 percentage point ahead of 1997, and 2 points ahead of the 5-year average. The percent of soybeans dropping leaves, at 13 percent, was 7 points ahead of the previous year and 5 points ahead of the average.

Pod counts from the September objective yield survey were the highest on record in Illinois, Iowa, Missouri, and Nebraska. Pod counts were also higher than the previous year in Indiana, Minnesota, and Ohio, but were not at record levels.

Peanuts: Production is forecast at 3.63 billion pounds, up 4 percent from the August 1 forecast and up 3 percent from last year's crop. Area for harvest is expected to total 1.48 million acres, up 4 percent from August and 5 percent above 1997. Texas was the only state to adjust their harvested acreage from the August report, increasing their expectations by 50,000 acres. U.S. yields are expected to average 2,459 pounds, up 17 pounds from last month but down 48 pounds from 1997.

Production in the Southeastern States (Alabama, Florida, Georgia, and South Carolina) is expected to total 1.94 billion pounds, up 2 percent from last month but down 1 percent last year. Yields in the four-State area are expected to average 2,366 pounds per acre, up 56 pounds from August 1 but 70 pounds below 1997. Yield prospects in Alabama were 100 pounds higher than last month. Early harvest is underway and the crop was in mostly fair to good condition by the end of August. The Georgia crop outlook improved some compared with last month. Showers and lower temperatures during August aided crop development. The peanut yield in Florida was unchanged from last month with 9 percent of the crop harvested by August 30.

The Virginia-North Carolina production is forecast at 555 million pounds, 2 percent below last month but 7 percent above last year's crop. Yield per harvested acre in the region, at 2,775 pounds, is 116 pounds above last year's final average. Yield prospects in North Carolina decreased from last month due to the heavy rains from Hurricane Bonnie. On August 30, the Virginia-North Carolina crop was rated in mostly good to fair condition.

Southwest crop production (New Mexico, Oklahoma, and Texas) is expected to total 1.13 billion pounds, up 11 percent from last month and 8 percent above 1997. Yields in the tri-state area are expected to average 2,490 pounds, 21 pounds below last month and 84 pounds per acre below 1997. New Mexico outlook improved from the previous month forecast with no disease problems reported. Yield prospects in Oklahoma remained unchanged from last month, with crop maturity running ahead of normal. As of August 30, digging had begun in Texas on the earliest fields, with crop conditions rated mostly good to fair.

Cotton: Upland cotton harvested acreage, at 10.4 million acres, is down 95,000 acres from last month and down 20 percent from last year. Harvested acreage was reduced 50,000 acres in Georgia and 45,000 acres in California. American-Pima harvested acreage is up 2,000 acres from August, at 246,500 acres, but down 1 percent from 1997.

Texas cotton condition showed very little improvement during the month, as a result of high temperatures. Rainfall had limited benefit on the non-irrigated acreage, and these fields remained stressed from lack of moisture. The rains interrupted harvest in Central Texas, while the Blackland harvest continued. Harvest neared completion in the Coastal Bend, Upper Coast, and Rio Grande. At the end of August, 18 percent of Texas' acreage was harvested compared to the 5-year average of 13 percent. 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 and boll opening was 37 percent complete compared to the average of 25 percent. Because the irrigated acreage represents such a large percentage of the area for harvest in Texas this year, the objective yield survey data indicate Texas' large boll counts are the highest during the past 10 years. Small bolls and squares rank tenth and eighth, respectively, for the same period. In Oklahoma, the crop's potential decreased during the month. On August 30, 62 percent of the acreage was rated in fair or good condition, and 31 percent was rated poor or very poor.

The Delta States (Arkansas, Louisiana, Mississippi, Missouri, and Tennessee) rated their cotton in mostly fair to good condition on August 30. Louisiana had 30 percent of their acreage in poor or very poor condition and Missouri showed 35 percent in these same two categories. Missouri's acreage received heavy rains during early August and then dry conditions began, with mild temperatures, which lowered yield potential. The Tennessee crop had high insect infestations and rainfall made chemical applications difficult. Arkansas and Louisiana producers applied chemicals because of increasing insect pressure and boll rot was also reported. Boll set was complete in early August in Louisiana, Mississippi, and Missouri, several points ahead of the 5-year average pace. The boll set in Arkansas and Tennessee was complete in mid-August, about equal to the average. Boll opening was ahead of average in all States. Arkansas was 32 percent open, 12 points ahead of normal, and Louisiana had bolls opened on 79 percent of the acreage, compared to the normal progress of 46 percent. Mississippi had 73 percent of their acreage showing open bolls, 29 points ahead of average. Most States showed decreases in crop condition during August, although the largest decline occurred in Louisiana and Missouri. On August 30, Arkansas showed 16 percent of their acreage in very poor or poor condition, 38 percent was fair, and 38 percent was in good condition. Mississippi rated 12 percent of their crop as poor to very poor, 37 percent fair, and 43 percent excellent on August 30. On this same date, Louisiana's cotton showed 35 percent fair, 30 percent good, and 5 percent in excellent condition. Data from cotton objective yield plots show Arkansas has the second lowest count of large bolls and squares since 1989 and count of small bolls are the lowest. Louisiana ranks fifth in large boll counts during the previous 10 years, the number of small bolls is the fourth lowest, and square counts are the highest since 1989. Mississippi's large boll count is the second highest in the past 10 years and small bolls and squares rank eighth and fifth, respectively.

Arizona's crop was subject to late planting, extremely high temperatures, and above normal rainfall during the season. On August 30, 47 percent of the acreage was in fair condition, 22 percent in good condition, and 12 percent was rated excellent. On this same date, 38 percent of the acreage was showing open bolls which is one-half of the normal amount. Cotton development in California was also behind the average pace. In early August, boll set was one-fourth the normal development, and on August 23, it was one-half the normal pace. One percent of the acreage showed open bolls on August 30, which was 35 points behind the 5-year average. Some improvement in condition was shown during the month but, at month's end, 60 percent of the acreage was rated fair and 40 percent was rated in good condition. California producers continued to spray for aphids, lygus, mites, worms, and whitefly during the month. In early August, growth regulators were applied. Some early planted California fields received the final irrigation. Objective yield survey counts for California indicate the lowest count of large bolls during the past 10 years, while small bolls and square counts rank first and second, respectively, during the same time period.

In the Southeastern States (Alabama, Georgia, North Carolina, and South Carolina), the crop's condition was mostly in fair to good condition. In late August, only Georgia's boll set was complete. Alabama's acreage was 99 percent complete, North Carolina showed 94 percent complete, and South Carolina's boll set was at 96 percent. All States in the region were ahead of the normal boll opening progress. Alabama was 38 percent open, 20 points ahead of normal, and Georgia, at 37 percent open, was 6 points ahead of the average. North and South Carolina showed open bolls at 25 percent and 31 percent, respectively. Hurricane Bonnie entered 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 and weren't heavily affected. On August 30, one-fourth of North Carolina's acreage was in fair condition, 65 percent good, and 6 percent excellent. Alabama rated 34 percent of the crop in fair condition, 42 percent good, 13 percent very poor, and 9 percent poor. Yield potential in Alabama improved during the month due to recent rains. Sixty percent of the Georgia acreage was in fair or good condition on this same date, 13 percent was very poor, and one-fourth was poor. South Carolina showed one-third of the cotton in good condition and 38 percent as fair.

The American-Pima production forecast, at 462,000 bales, is down 16 percent from 1997's output, and down 2,000 bales from August. The U.S. yield is indicated at 900 pounds per harvested acre, down 156 pounds from last year. California's production was unchanged from the August forecast. Producers applied growth regulators during the

month to accelerate boll growth. High temperatures during August caused some boll shedding. Growers in western Fresno County have been treating for lygus and some fields have shown poor boll retention. Arizona's harvested area was increased 2,000 acres, to 15,000 acres. Texas' production was lowered 5,000 bales from last month, while production in Arizona and New Mexico was increased 2,000 bales and 1,000 bales, respectively.

Ginnings totaled 523,950 running bales prior to September 1, compared with 358,700 running bales ginned to the same date last year and 342,400 running bales in 1996.

Summer Potatoes: The September forecast of 1998 summer potato production is 19.5 million cwt, 9 percent above a year ago and 1 percent above the July 1 forecast. Harvest area is estimated at 70,800 acres, 7 percent above last year but 3 percent below two years ago. The average yield of 276 is 5 cwt above last year and 15 cwt above 1996.

Yields are above last year in the Del-Mar-Va Peninsula, Texas, Colorado, and California. Colorado and Texas yields are record high, and California growers tied a record high. Colorado fields suffered some hail damage in Weld County. Yields are up from last year in Delaware, southern New Jersey, and Virginia, but the crop is short of yields produced two and three years ago. Most areas got off to a late start and were then hit by hot, dry weather during the summer.

Harvest is finished in most States. Sizes are down and yields are lower than last year in the Midwest, New Jersey, New Mexico, and eastern Gulf region. Some acres were abandoned in New Mexico, Missouri, and Virginia.

Fall Potatoes, 1997 Final: Production of 1997 fall potatoes is finalized at 423 million cwt, down 7 percent from the record large crop of 1996 but 5 percent above 1995 production. Farmers harvested 1.18 million acres of fall potatoes in 1997, down 6 percent from 1996 and 2 percent less than 1995. The average yield was 359 cwt per acre, down 5 cwt from 1996 but 25 cwt above 1995. Compared with annual estimates made last January, larger crops were registered in Idaho, Washington, Wisconsin, Massachusetts, and Rhode Island; smaller crops were seen in Colorado and New York.

All Potatoes, 1997: Final production of potatoes from all four seasons in 1997 totaled 466 million cwt, down 7 percent from a year earlier but 5 percent above 1995. Area harvested is estimated at 1.35 million acres, down 6 percent from 1996 and 2 percent below 1995. Yield, averaging 346 cwt per acre, dropped 4 cwt from a year ago but was 24 cwt higher than two years ago. In 1997, all seasonal groups decreased in production from the previous year: Winter dropped 5 percent; spring slipped 3 percent; summer fell 8 percent; and fall potatoes lost 7 percent.

Tobacco: U.S. all tobacco production for 1998 is forecast at 1.53 billion pounds, down 2 percent from the August 1 forecast and 14 percent below 1997 production. Harvested acres are expected to be 749,495 acres, down 8 percent from last year. Yields for 1998 are estimated to average 2,048 pounds per acre, down 55 pounds from last month and 153 pounds below the average for 1997.

Flue-cured production is expected to total 772 million pounds, down 4 percent from August 1 and 26 percent below last year's output. Flue-cured growers plan to harvest 384,500 acres, 15 percent below last year. Flue-cured tobacco accounts for 51 percent of this year's total tobacco acreage. Flue-cured yields are expected to average 2,007 pounds per acre, down 78 pounds from August and 299 pounds below last year.

North Carolina's flue-cured crop prospects declined from August 1 due to adverse weather conditions. The Piedmont area continues to suffer drought-like conditions, while the Eastern and Border Belt regions endured Hurricane Bonnie.

Burley production is expected to total 673 million pounds, 4 percent above the 1997 production. Yield is expected to average 2,085 pounds per acre, 34 pounds below the August 1 forecast but 26 pounds above the average for 1997. Burley tobacco growers expect to harvest 322,500 acres, 2 percent above last year. Kentucky, with 72 percent of the 1998 burley production, expects to produce 3 percent more than a year ago.

Kentucky's Burley tobacco is doing very well this year, even with the dry weather. Blue mold damage has been held to a minimum by the drier weather in August. As of August 30, 42 percent of the burley crop had been cut compared to 21 percent last year.

Florida Citrus: Weather in Florida's citrus producing areas was mostly normal during August. There were frequent rains and thunderstorms, along with hot and humid conditions. Rainfall amounts were average depending on location. The ideal weather has produced an abundance of new growth on trees of all ages in the citrus belt. New crop fruit responded well during the month and made good progress. There are still some groves that have received very little production care during the spring and early summer. These groves have trees with yellowing foliage and fruit of varying sizes and quantities. Caretakers have been very active maintaining cover crops, spraying, fertilizing, and removing dead, sick, and unthrifty trees.

California Citrus: Valencia orange picking was slow due to normal competition in the marketplace from stone fruits during August. Approximately two-thirds of the crop has been picked. Harvests of grapefruit and South Coast lemons were active. The new crop navel oranges were maturing well but with much smaller fruit size than last season.

Sugarbeets: Planted acres were updated from the August crop report in Montana and North Dakota. Acres to be harvested in the 12 sugarbeet-producing states were forecasted at just under 1.46 million acres, 27,200 acres above 1997 but 5,300 acres below the previous forecast. Heavy rains drowned several thousand acres in the southern Red River Valley of North Dakota and Minnesota and accounts for most of the increase in abandonment.

Production is forecasted at 31.1 million tons, 4 percent above the 1997 final production estimate, but slightly below the August 1 forecast. If realized, production would be the second largest on record. Dry weather and above normal temperatures have stressed the sugarbeet crop in Michigan and North Dakota, although early taproot development in Michigan partially offset the effects of the dry summer. Adequate moisture and cooler nighttime temperatures have been beneficial to the Colorado crop. In California, a cold, wet spring delayed planting and early crop development, which eventually delayed the beginning of the harvest season by nearly 4 weeks.

Sugarcane: U.S. sugarcane production for sugar and seed in 1998 is expected to total 31.3 million tons, down 1 percent from 1997, but 1 percent above the August 1 estimate. The expected area for harvest, at 939,000 acres, is up 5,000 acres from the previous estimate and nearly 3 percent above last year. The forecasted yield, at 33.3 tons per acre, is 0.2 tons above the August estimate, but 1.4 tons below 1997.

Rain improved crop prospects in Florida and mills were making preparations for beginning operations. Dry weather allowed harvest to begin early in Hawaii. Stands were good in Louisiana, but yields were expected to fall below 1997 due to the summer drought. In Texas, water supplies improved with recent rains, but additional rains will be needed to maintain yield prospects.

Papayas: Hawaii fresh papaya production is estimated at 2.74 million pounds for August, 9 percent lower than July but 1 percent higher than a year ago. Area devoted to papayas totaled 3,645 acres in August, less than 1 percent lower than July but 32 percent lower than a year ago. Area harvested, totaling 2,400 acres, was 2 percent lower than last month but 2 percent higher than August 1997.

August weather conditions were a mix of sunshine and showers. Soil moisture was considered adequate in areas dependent on rainfall.

California Fruits and Nuts: Crop harvesting dominated growers' activities during August. Picking grapes for fresh use in the Coachella Valley was completed early in the month. The harvest of fresh use grapes in the San Joaquin Valley was active throughout August. Major varieties picked included Flame Seedless, Red Globe, and Thompson Seedless. Mildew, berry cracking, and premature bunch rot caused by heat and humidity were concerns to growers. By the end of the month, Thompson Seedless grapes were harvested for wine use and dried for raisins. Other wine type variety grapes were also harvested in late August.

San Joaquin Valley stone fruit growers were picking nectarines, plums, and freestone peaches. Wind scarring, hail marks, and split pits were concerns for growers. The fig and clingstone peach harvests were active. Bartlett pear picking was active in the Sacramento-San Joaquin area and Lake and Mendocino counties throughout August. Asian pear picking was also active in the San Joaquin Valley. Gala and Granny Smith apples were picked. The almond harvest began in mid-August. Walnut growers whitewashed their trees for sunburn protection. Strawberry growers in the San Joaquin Valley were setting plants for the fall season.

Hazelnuts: Hazelnut production in Oregon and Washington is forecast at 16,500 tons for 1998. This would be 65 percent smaller than last year's record crop and 11 percent less than the 1996 production. Oregon is expected to account for 16,450 tons and Washington the remaining 50 tons.

Crop progress is about normal. The small production expectations result from several factors. First, trees need to recover from the record large 1997 crop. In addition, winter ice storms caused considerable damage to limbs, leading to pruning of fruiting wood. Some growers reported that many catkins fell off the trees in December. In the spring, cool, wet weather caused a light flower bloom and hindered pollen movement.

The results of the hazelnut objective yield survey showed the number of nuts sampled per orchard was down 72 percent from last year and 12 percent from 1996. The percentage of good nuts was slightly higher than a year earlier and about two percentage points higher than 1996. The average dry weight of the good nuts was the highest since 1994, while the average size was the same as 1996. Brown stained nuts amounted to 2.7 percent of the sample, about 0.5 percentage point below last year and slightly higher than 1996.

Walnuts: The 1998 California walnut production is forecast at 220,000 tons, down 18 percent from 1997's production of 269,000 tons. This is 14 percent below the July forecast of 255,000. The July forecast was based upon subjective information provided by growers. The September forecast is based upon the Walnut Objective Measurement Survey conducted August 3 through August 29, 1998.

Survey data indicated an average nut set of 1,407, down 20 percent from last year's average of 1,753. The Hartley nut set was down 35 percent; Serr, up 4 percent; Franquette, down 30 percent; and Chandler, down 17 percent from 1997. Percent of sound kernels in-shell was 94.4 percent statewide. In-shell weight per nut was 21.4 grams, while the average in-shell suture measurement was 31.9 millimeters. The average length in-shell was 39.5 millimeters.

Due to a very wet spring, the crop is about three weeks behind normal. Mid-season varieties are expected to be about average, while late variety production is expected to be lower than last year. Levels of sunburn are expected to be higher than last year.

Pistachios: California pistachio production is forecast at a record 195 million pounds. The new record would be 8 percent above last year's record production. This forecast is based upon an objective measurement survey completed August 27, 1998. Production has become more stable as Pioneer Gold rootstock has replaced the older Atlantica rootstock. The Pioneer Gold generally bears heavy on even years and the Atlantica on odd years.

The estimated average number of clusters per tree was 895. The estimated total number of filled nuts per tree was 9,542 as compared with 8,326 in 1997. The average number of nuts per cluster, including both filled and blank, was 13.8 nuts per cluster. The percent of nuts filled was 77.2 percent. The average in-hull weight per nut including blanks was 2.86 grams, compared to 2.78 grams last year. The in-hull cross suture measurement was 15.05 millimeters, compared to 14.92 millimeters in 1997. Average kernel weight in 1998 was 0.828 grams. The average suture was 10.31 millimeters, the average cross suture was 9.51 millimeters, and the kernel length was 16.48 millimeters.

Due to the later than usual spring, the crop is approximately two to three weeks behind normal.

Pecans: The September 1 forecast for pecan production is 185 million pounds (in-shell basis), down 45 percent from last year's 338 million pound crop. Improved varieties are expected to account for 141 million pounds, 76 percent of the total. Native varieties, at 44 million pounds, are 67 percent below the large 1997 crop.

Arizona, whose entire crop is made up of improved varieties, is forecast at 17.5 million pounds, the same as last year. Many growers reported heavy wind damage to blossoms and pollinization, as well as freeze damage. However, an increase in acreage is expected to counter the reduced Arizona yield. North Carolina, at 2.5 million pounds, is the only state forecasting a larger production for 1998.

Texas is forecast at 40 million pounds, down 56 percent or 50 million pounds from 1997. Most of the Texas production drop is expected in the native and seedling varieties, which produced a large crop last year. The extremely dry conditions during critical development has impacted the Texas crop. The Georgia pecan crop is expected to total 60 million pounds, down 43 percent from a year earlier. Dry conditions last fall produced a light nut set for the 1998 crop. Production expectations have been further reduced by excessive nut drop due to June and July dry conditions.

The Oklahoma pecan crop, which comes primarily from native trees, is forecast at 10 million pounds, down 25 million from last year. The cyclical nature of native pecans, combined with dry weather conditions, points to the lower number. Virtually all states reported that lack of moisture will be the main reason for smaller crops.

Reliability of September 1 Crop Production Forecasts

Survey Procedures: Objective yield and farm operator surveys were conducted between August 25 and September 3 to gather information on expected yield as of September 1. The objective yield surveys for wheat, corn, soybeans, and cotton were conducted in the major producing States that usually account for about 75 percent of the U.S. production. Randomly selected plots were revisited to make current counts. The items counted within the selected plots depend on the crop and the maturity of that crop. In all cases, number of plants are recorded along with other measurements that provide information to forecast the number of heads, ears, pods, or bolls and their weight. The counts are used with similar data from previous years to develop a projected biological yield. The five-year average harvesting loss is subtracted to obtain a net yield. The plots are revisited each month until crop maturity when the fruit is harvested and weighed. After the farm operator has harvested the sample field, another plot is sampled to obtain current year harvesting loss.

The farm operator survey was conducted primarily by telephone with some use of mail and personal interviewers. Approximately 15,000 producers were interviewed during the survey period and asked questions about probable yield.

Estimating Procedures: National and State level objective yield and grower reported survey estimates were reviewed for errors, reasonableness, and consistency with historical estimates. The survey data were also reviewed considering weather patterns and crop progress compared to previous month and previous years. Each State Statistical Office submits their analysis of the current situation to the Agricultural Statistics Board (ASB). The ASB uses the survey data and the State analysis to prepare the published September 1 forecast.

Revision Policy: The September 1 production forecast will not be revised; instead a new forecast will be made each month throughout the growing season. At the end of the marketing year administrative records and a balance sheet are utilized using carryover stocks, production, exports, processing, feeding, and ending stocks. Revisions are then made if data relationships warrant changes. Harvested acres may be revised any time a production forecast is made if there is strong evidence that the intended harvested area has changed since the last estimate.

Reliability: To assist users in evaluating the reliability of the September 1 production forecasts, the "**Root Mean Square Error**," a statistical measure based on past performance, is computed. The deviation between the September 1 production forecast and the final estimate is expressed as a percentage of the final estimate. The average of squared percentage deviations for the 1978-1997 20-year period is computed. The square root of the average becomes statistically the "Root Mean Square Error." Probability statements can be made concerning expected differences in the current forecast relative to the final end-of-season estimate, assuming that factors affecting this year's forecast are not different from those influencing recent years. For example, the "Root Mean Square Error" for the September 1 corn for grain production forecast is 5.8 percent. This means that chances are 2 out of 3 that the current production forecast will not be above or below the final estimate by more than 5.8 percent. Chances are 9 out of 10 (**90 percent confidence level**) that the difference will not exceed 10.0 percent.

Also, shown in the following table is a 10-year record for selected crops of the differences between the September 1 forecast and the final estimates. Using corn again as an example, changes between the September 1 forecast and the final estimate during the past 10 years have averaged 453 million bushels, ranging from 98 million to 893 million bushels. The September 1 forecast has been below the final estimate 7 times and above 3 times. This does not imply that the September 1 corn forecast this year is likely to understate or overstate final production. For most crops, the number of years the forecasts have been below or above the final estimate is about equally distributed.

Reliability of September 1 Crop Production Forecasts

Crop	Unit	Root Mean Square Error Confidence Interval		10-Year Record of Differences Between Forecast and Final Estimate				
		95 Percent	90 Percent	Quantity			Years	
				Average	Smallest	Largest	Below Final	Above Final
				<i>Million</i>	<i>Million</i>	<i>Million</i>	<i>Number</i>	<i>Number</i>
Corn For Grain	Bu	5.8	10.0	453	98	893	7	3
Sorghum for Grain	Bu	7.3	12.7	43	1	115	6	4
Barley	Bu	3.5	6.2	12	3	38	5	5
All Wheat	Bu	1.4	2.5	32	2	97	3	7
Durum	Bu	5.7	9.9	5	1	12	3	7
Other Spring	Bu	3.6	6.3	18	1	62	4	6
Rice	Cwt	4.3	7.3	6	0	16	5	5
Soybeans for Beans	Bu	5.2	9.0	96	19	201	7	3
Cotton	Bales	6.0	10.4	825	84	2,366	6	4

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October 19, 1998

Holiday Inn Mart Plaza
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For registration details, see the NASS home page at <http://www.usda.gov/nass/> or contact Fred Vogel (NASS) at (202) 720-3896 or at fvogel@nass.usda.gov