Crop Production

National Agricultural Statistics Service
Fact Finding for Agriculture

United States Department of Agriculture

Agricultural Statistics Board

Washington, D.C.

RELEASED: January 11, 1989
3:00 P.M. ET

HIGHLIGHTS

ALL COTTON production in 1988 is forecast at 15.4 million bales, up 5 percent from 1987 and up 2 percent from the December 1 forecast.

CITRUS production is forecast at 13.2 million tons, 6 percent higher than last season and 13 percent above the 1986-87 season.

ORANGE production is forecast at 215 million boxes, virtually unchanged from December 1 but 7 percent above last season.

GRAPEFRUIT production, including California's "Desert" grapefruit but excluding California's "Other Areas" grapefruit is forecast at 63.7 million boxes, unchanged from December 1 but 1 percent above last season.

LEMON production, at 22.4 million boxes, is down 1 percent from the previous forecast but 8 percent above last season.

WINTER POTATO production for 1989 is forecast at 2.74 million cwt, up 5 percent from last year and 10 percent above 1987.

HAY STOCKS on farms December 1, 1988 totaled 90.9 million tons, 24 percent below holdings on the same date in 1987 and 25 percent below December 1, 1986.

****
* NOTICE *
*
* This publication contains revised Valencia and total orange estimates *
* for California and the United States. Revised total citrus estimates *
* are also shown for California and the United States. *
*
* Requests for a subscription order form covering all available reports *
* should be directed to Agricultural Statistics Board Publications, Room *
* 5829-South Building, USDA, Washington, D.C. 20250. (202) 447-4021. *
*
* This report and other statistical, economic, marketing and news reports *
* are available electronically as soon as possible following release *
* through USDA's EDI SERVICE. For more information, call or write: *
* Russell Forte, (202) 447-5505, OGPA, USDA, Washington, D.C. 20250. *
*
* The next issue of this report will be published February 9, 1989 *
****

For Information Call: (202) 447-2127

UNITED STATES CROP SUMMARY
(DOMESTIC UNITS)
CITRUS FRUITS, PRODUCTION 1/

CROP	1987-88	INDICATED 1988-89	
		DEC 1, 1988	JAN 1, 1989
	1,000 BOXES		
ORANGES	200,040	215,150	214,750
LEMONS	20,650		22,400

1/ SEASON BEGINS WITH THE BLOOM OF THE FIRST YEAR SHOWN AND ENDS WITH THE COMPLETION OF HARVEST THE FOLLOWING YEAR.

COTTON - AREA PLANTED AND HARVESTED

CROP	AREA PLANTED		AREA HARVESTED	
	1987	IND 1988	1987	IND 1988
	1,000 ACRES			
ALL COTTON	10,407.2	12,497.4	10,035.3	11,890.8
UPLAND	10,269.3	12,310.0	9,898.7	11,703.9
AMER-PIMA	137.9	187.4	136.6	186.9

COTTON AND COTTONSEED - YIELD PER ACRE AND PRODUCTION

CROP AND UNIT	YIELD PER ACRE 1/		PRODUCTION 2/		
	1987	INDICATED 1988	1987	INDICATED DEC 1, 1988	INDICATED JAN 1, 1989
			1,000		
ALL COTTON BALE	706	623	14,759.9	15,196.6	15,445.5
UPLAND "	702	620	14,475.3	14,849.4	15,107.3
AMER-PIMA "	1,000	869	284.6	347.2	338.2
COTTONSEED TON			5,769	5,951	6,054

1/ YIELD IN POUNDS. 2/ COTTON PRODUCTION IN 480-LB NET WEIGHT BALES.

The CROP PRODUCTION report contains State and National estimates with related information on selected agricultural commodities. These data were prepared and adopted by the Agricultural Statistics Board which consists of commodity statisticians from the field offices and Washington headquarters.

A P P R O V E D:

Richard W. Goldberg

ACTING SECRETARY OF AGRICULTURE

AGRICULTURAL STATISTICS BOARD:
Rich D. Allen, Chairperson,
L. Duane Jewell, Secretary,
Robert L. Addison, Thomas E. Kurtz,
Donald M. Bay, Hugh M. McWilliams,
Arvin R. Budge, Archie J. Olson,
S. Radley Edwards, Darwin E. Ransom,
Robert L. Freie, James L. Smith,
Carol C. House, H. James Tippett,
John D. Witzig.

WINTER POTATOES

AREA PLANTED		AREA HARVESTED	
1988	IND 1989	1988	IND 1989
1,000 ACRES			
12.5	12.8	12.3	12.8
YIELD PER ACRE		**PRODUCTION**	
1988	IND 1989	1988	IND 1989
CWT		1,000 CWT	
213	214	2,616	2,744

HAY STOCKS ON FARMS

DATE	1987	1988
	1,000 TONS	
MAY 1	32,418	27,353
DEC 1	119,845	90,887

UNITED STATES CROP SUMMARY
(METRIC UNITS)
CITRUS FRUITS, PRODUCTION 1/

CROP	1987-88	INDICATED 1988-89	
		DEC 1, 1988	JAN 1, 1989
	METRIC TONS		
ORANGES	7,750,990	8,347,910	8,334,310
LEMONS	712,140		777,460

1/ SEASON BEGINS WITH THE BLOOM OF THE FIRST YEAR SHOWN AND ENDS WITH THE COMPLETION OF HARVEST THE FOLLOWING YEAR.

COTTON - AREA PLANTED AND HARVESTED

CROP	AREA PLANTED		AREA HARVESTED	
	1987	IND 1988	1987	IND 1988
	HECTARES			
ALL COTTON	4,211,690	5,057,570	4,061,180	4,812,090
UPLAND	4,155,880	4,981,730	4,005,900	4,736,450
AMER-PIMA	55,810	75,840	55,280	75,640

COTTON AND COTTONSEED - YIELD PER HECTARE AND PRODUCTION

CROP	YIELD PER HECTARE		PRODUCTION		
				INDICATED	
	1987	INDICATED 1988	1987	DEC 1, 1988	JAN 1, 1989
			METRIC TONS		
ALL COTTON	0.79	.70	3,213,570	3,308,650	3,362,840
UPLAND	0.79	.69	3,151,610	3,233,060	3,289,210
AMER-PIMA	1.12	.97	61,960	75,590	73,630
COTTONSEED			5,233,550	5,398,660	5,492,100

WINTER POTATOES

AREA PLANTED		AREA HARVESTED	
1988	IND 1989	1988	IND 1989
HECTARES			
5,060	5,180	4,980	5,180
YIELD PER HECTARE		PRODUCTION	
1988	IND 1989	1988	IND 1989
METRIC TONS			
23.83	24.03	118,660	124,470

HAY STOCKS ON FARMS

DATE	1987	1988
	METRIC TONS	
MAY 1	29,409,110	24,814,220
DEC 1	108,721,560	82,451,300

COTTON

STATE	AREA PLANTED			AREA HARVESTED		
	1986	1987	1988	1986	1987	1988
	1,000 ACRES					
UPLAND						
ALA	315.0	335.0	375.0	313.0	333.0	355.0
ARIZ	250.0	290.0	350.0	249.0	289.0	349.0
ARK	490.0	555.0	695.0	480.0	550.0	675.0
CALIF	1,000.0	1,150.0	1,350.0	990.0	1,140.0	1,335.0
FLA	19.5	29.5	33.0	19.0	29.0	29.0
GA	225.0	250.0	350.0	195.0	245.0	315.0
KANS	1.2	1.0	1.0	1.0	.9	.9
LA	580.0	605.0	735.0	570.0	600.0	645.0
MISS	1,020.0	1,020.0	1,230.0	1,000.0	1,010.0	1,190.0
MO	178.0	190.0	240.0	160.0	189.0	237.0
N MEX	63.0	66.0	77.0	50.0	62.0	69.0
N C	82.0	96.0	126.0	81.0	95.0	124.0
OKLA	400.0	420.0	460.0	350.0	400.0	400.0
S C	118.0	120.0	145.0	113.0	119.0	142.0
TENN	340.0	440.0	540.0	335.0	435.0	535.0
TEX	4,850.0	4,700.0	5,600.0	3,450.0	4,400.0	5,300.0
VA	1.4	1.8	3.0	1.3	1.8	3.0
U S	9,933.1	10,269.3	12,310.0	8,357.3	9,898.7	11,703.9
AMER-PIMA						
ARIZ	74.0	91.0	128.0	73.8	90.8	128.0
CALIF		0.9	1.8		0.9	1.8
N MEX	11.1	14.0	17.6	11.1	13.9	17.6
TEX	26.4	32.0	40.0	26.2	31.0	39.5
U S	111.5	137.9	187.4	111.1	136.6	186.9
ALL						
ALA	315.0	335.0	375.0	313.0	333.0	355.0
ARIZ	324.0	381.0	478.0	322.8	379.8	477.0
ARK	490.0	555.0	695.0	480.0	550.0	675.0
CALIF	1,000.0	1,150.9	1,351.8	990.0	1,140.9	1,336.8
FLA	19.5	29.5	33.0	19.0	29.0	29.0
GA	225.0	250.0	350.0	195.0	245.0	315.0
KANS	1.2	1.0	1.0	1.0	.9	.9
LA	580.0	605.0	735.0	570.0	600.0	645.0
MISS	1,020.0	1,020.0	1,230.0	1,000.0	1,010.0	1,190.0
MO	178.0	190.0	240.0	160.0	189.0	237.0
N MEX	74.1	80.0	94.6	61.1	75.9	86.6
N C	82.0	96.0	126.0	81.0	95.0	124.0
OKLA	400.0	420.0	460.0	350.0	400.0	400.0
S C	118.0	120.0	145.0	113.0	119.0	142.0
TENN	340.0	440.0	540.0	335.0	435.0	535.0
TEX	4,876.4	4,732.0	5,640.0	3,476.2	4,431.0	5,339.5
VA	1.4	1.8	3.0	1.3	1.8	3.0
U S	10,044.6	10,407.2	12,497.4	8,468.4	10,035.3	11,890.8

COTTON

STATE	YIELD			PRODUCTION 1/		
	1986	1987	1988	1986	1987	1988
	POUNDS			1,000 BALES 2/		
UPLAND						
ALA	506	572	514	330.0	397.0	380.0
ARIZ	1,301	1,410	1,197	675.0	849.0	870.0
ARK	602	786	747	602.0	901.0	1,050.0
CALIF	1,088	1,259	1,025	2,245.0	2,989.0	2,850.0
FLA	707	646	497	28.0	39.0	30.0
GA	455	662	564	185.0	338.0	370.0
KANS	336	480	427	.7	.9	.8
LA	567	782	707	673.0	977.0	950.0
MISS	571	829	738	1,190.0	1,745.0	1,830.0
MO	588	838	628	196.0	330.0	310.0
N MEX	595	689	717	62.0	89.0	103.0
N C	646	495	511	109.0	98.0	132.0
OKLA	288	415	348	210.0	346.0	290.0
S C	370	428	500	87.0	106.0	148.0
TENN	567	700	529	396.0	634.0	590.0
TEX	353	506	471	2,535.0	4,635.0	5,200.0
VA	554	373	560	1.5	1.4	3.5
U S	547	702	620	9,525.2	14,475.3	15,107.3
AMER-PIMA						
ARIZ	965	1,126	938	148.3	213.0	250.0
CALIF		1,173	853		2.2	3.2
N MEX	718	642	682	16.6	18.6	25.0
TEX	751	787	729	41.0	50.8	60.0
U S	890	1,000	869	205.9	284.6	338.2
ALL						
ALA	506	572	514	330.0	397.0	380.0
ARIZ	1,224	1,342	1,127	823.3	1,062.0	1,120.0
ARK	602	786	747	602.0	901.0	1,050.0
CALIF	1,088	1,258	1,024	2,245.0	2,991.2	2,853.2
FLA	707	646	497	28.0	39.0	30.0
GA	455	662	564	185.0	338.0	370.0
KANS	336	480	427	.7	.9	.8
LA	567	782	707	673.0	977.0	950.0
MISS	571	829	738	1,190.0	1,745.0	1,830.0
MO	588	838	628	196.0	330.0	310.0
N MEX	617	680	709	78.6	107.6	128.0
N C	646	495	511	109.0	98.0	132.0
OKLA	288	415	348	210.0	346.0	290.0
S C	370	428	500	87.0	106.0	148.0
TENN	567	700	529	396.0	634.0	590.0
TEX	356	508	473	2,576.0	4,685.8	5,260.0
VA	554	373	560	1.5	1.4	3.5
U S	552	706	623	9,731.1	14,759.9	15,445.5

1/ PRODUCTION GINNED AND TO BE GINNED. 2/ 480-LB. NET WEIGHT BALES.

COTTONSEED

STATE	PRODUCTION		
	1986	1987	IND 1988
	1,000 TONS		
ALA	122.0	150.0	138.5
ARIZ	309.0	390.0	417.0
ARK	228.0	338.0	395.8
CALIF	875.0	1,151.8	1,131.5
FLA	9.8	14.4	10.8
GA	64.0	122.0	129.9
KANS	.3	.4	.3
LA	257.0	378.0	355.1
MISS	458.0	678.0	698.6
MO	81.0	130.0	124.0
N MEX	30.5	42.3	49.7
N C	40.0	33.0	47.5
OKLA	85.0	155.0	118.0
S C	31.0	36.0	51.1
TENN	157.0	235.0	226.2
TEX	1,052.8	1,914.8	2,158.7
VA	.5	.5	1.3
U S	3,800.9	5,769.2	6,054.0

POTATOES

SEASONAL GROUP AND STATE	AREA PLANTED 1988	AREA PLANTED IND 1989	AREA HARVESTED 1988	AREA HARVESTED IND 1989	YIELD 1988	YIELD IND 1989	PRODUCTION 1987	PRODUCTION 1988	PRODUCTION IND 1989
	1,000 ACRES				CWT		1,000 CWT		
WINTER									
CALIF	5.2	5.5	5.2	5.5	230	240	1,081	1,196	1,320
FLA	7.3	7.3	7.1	7.3	200	195	1,420	1,420	1,424
TOTAL	12.5	12.8	12.3	12.8	213	214	2,501	2,616	2,744
SPRING 1/									
ALA	4.2		4.1		135		613	554	
ARIZ	5.3		5.3		235		1,348	1,246	
CALIF	19.6		19.6		385		7,881	7,546	
FLA									
HASTINGS	27.0		26.5		235		4,505	6,228	
OTHER	2.6		2.5		210		399	525	
LA	.5		.4		50		18	20	
N C	14.5		14.4		190		2,030	2,736	
TEX	6.4		6.2		185		930	1,147	
TOTAL	80.1		79.0		253		17,724	20,002	

1/ 1988 REVISED.

PAPAYAS - HAWAII

MONTH	AREA TOTAL IN CROP 1987	AREA TOTAL IN CROP 1988	AREA HARVESTED 1987	AREA HARVESTED 1988	FRESH PRODUCTION 1987	FRESH PRODUCTION 1988	FRESH PRODUCTION FORECAST 1989
	ACRES				1,000 POUNDS		
NOV	4,095	4,550	2,445	2,320	5,940	5,600	
DEC	4,135	4,605	2,240	2,380	5,990	5,480	
JAN		4,120		2,450		4,010	5,000
FEB		4,075		2,285		2,930	4,500
MAR		4,075		2,245		3,150	4,600
APR		4,165		2,255		4,255	5,100
CUMULATIVE FRESH PRODUCTION JAN-DEC					56,000	56,140	

HAY STOCKS ON FARMS

STATE	MAY 1		DECEMBER 1	
	1987	1988	1987	1988
	1,000 TONS			
ALA	168	132	1,250	1,125
ARIZ	25	41	263	133
ARK	486	482	1,290	1,337
CALIF	345	360	2,341	2,163
COLO	728	809	3,033	2,374
CONN	36	22	129	111
DEL	6	5	36	41
FLA	101	80	479	474
GA	135	238	1,003	953
IDAHO	1,086	901	4,008	3,648
ILL	733	570	2,472	1,986
IND	358	360	1,754	1,233
IOWA	2,080	1,341	5,832	4,732
KANS	1,150	1,023	4,635	3,571
KY	574	727	3,893	3,286
LA	102	97	799	624
MAINE	108	81	278	290
MD	76	109	494	452
MASS	59	47	178	175
MICH	861	570	2,236	2,405
MINN	1,548	1,482	5,850	4,594
MISS	232	285	1,354	1,170
MO	1,266	927	5,375	4,334
MONT	1,296	1,179	4,842	2,706
NEBR	1,921	1,236	5,217	4,557
NEV	206	207	897	668
N H	42	36	118	130
N J	18	40	172	136
N MEX	92	67	536	353
N Y	1,028	843	3,688	2,964
N C	69	102	486	614
N DAK	1,465	1,343	5,275	2,312
OHIO	560	575	2,875	1,878
OKLA	1,417	883	3,972	3,734
OREG	689	392	2,200	1,665
PA	769	988	4,054	3,301
R I	7	5	12	11
S C	46	90	338	378
S D	4,105	2,765	8,508	4,614
TENN	251	370	2,485	2,056
TEX	2,313	1,665	8,089	5,778
UTAH	470	381	1,503	1,155
VT	206	179	587	532
VA	190	344	1,954	1,776
WASH	517	405	2,104	1,700
W VA	128	149	895	745
WIS	1,616	1,954	7,726	3,792
WYO	734	466	2,330	2,121
U S	32,418	27,353	119,845	90,887

REVISED VALENCIA AND TOTAL ORANGE ESTIMATES FOR CALIFORNIA AND THE UNITED STATES

STATE, CROP AND SEASON	BEARING ACREAGE	YIELD PER ACRE	UTILIZATION OF PRODUCTION		
			FRESH	PROCESSED	TOTAL
	ACRES	BOXES	1,000 BOXES 1/		
CALIFORNIA					
NAVEL AND MISC					
1987-88	105,500	299	24,900	6,600	31,500
VALENCIA					
1987-88*	66,500	411	16,300	11,000	27,300
ALL					
1987-88*	172,000	342	41,200	17,600	58,800
U S					
EARLY, MIDSEASON AND NAVEL					
1987-88	312,400	357	32,178	79,372	111,550
VALENCIA					
1987-88*	262,200	337	21,238	67,252	88,490
TOTAL					
1987-88*	574,600	348	53,416	146,624	200,040

	PRICE PER BOX 2/ 3/			VALUE OF PRODUCTION		
	FRESH	PROCESSED	ALL	FRESH	PROCESSED	TOTAL
	DOLLARS			1,000 DOLLARS		
CALIFORNIA						
NAVEL AND MISC						
1987-88	9.58	1.20	7.82	238,542	7,920	246,462
VALENCIA						
1987-88*	11.48	2.26	7.76	187,124	24,860	211,984
ALL						
1987-88*	10.33	1.86	7.80	425,666	32,780	458,446
U S						
EARLY, MIDSEASON AND NAVEL						
1987-88	9.59	7.26	7.88	308,223	569,835	878,058
VALENCIA						
1987-88*	11.07	8.76	9.26	235,686	576,619	812,305
TOTAL						
1987-88*	10.18	7.94	8.49	543,909	1,146,454	1,690,363

1/ SEE PAGE 12 FOR NET WEIGHT PER BOX. 2/ EQUIVALENT PACKINGHOUSE-DOOR RETURNS. 3/ U S SEASON AVERAGE PRICES ARE DERIVED BY WEIGHTING THE STATE SEASON AVERAGE PRICES PER BOX BY THE RESPECTIVE BOX WEIGHTS. * REVISED.

REVISED TOTAL CITRUS FOR CALIFORNIA AND THE UNITED STATES

CROP, STATE AND SEASON	BEARING ACREAGE	PRODUCTION	UTILIZATION OF PRODUCTION: FRESH	UTILIZATION OF PRODUCTION: PROCESSED	VALUE OF PRODUCTION
	ACRES		1,000 TONS		1,000 DOLLARS
TOTAL CITRUS					
CALIFORNIA					
1987-88*	249,700	3,223	2,190	1,033	717,583
U S					
1987-88*	832,400	12,728	4,176	8,552	2,525,604

* REVISED.

CITRUS FRUIT 1/

CROP AND STATE	PRODUCTION BOXES			PRODUCTION TON EQUIVALENT		
	UTILIZED		INDICATED	UTILIZED		INDICATED
	1986-87	1987-88	1988-89	1986-87	1987-88	1988-89
	1,000 UNITS 2/			1,000 UNITS		
ORANGES,EARLY MID & NAVEL 3/:						
ARIZ	1,000	610	550	37	23	21
CALIF	34,500	31,500	35,000	1,294	1,182	1,313
FLA	65,800	78,500	89,000	2,961	3,532	4,005
TEX	500	940	1,200	22	40	51
U S	101,800	111,550	125,750	4,314	4,777	5,390
ORANGES, VALENCIA						
ARIZ	1,700	1,200	1,450	64	45	54
CALIF 4/:	23,400	27,300	26,000	878	1,024	975
FLA	53,900	59,500	61,000	2,425	2,677	2,745
TEX	375	490	550	16	21	23
U S 4/:	79,375	88,490	89,000	3,383	3,767	3,797
ALL ORANGES						
ARIZ	2,700	1,810	2,000	101	68	75
CALIF 4/:	57,900	58,800	61,000	2,172	2,206	2,288
FLA	119,700	138,000	150,000	5,386	6,209	6,750
TEX	875	1,430	1,750	38	61	74
U S 4/:	181,175	200,040	214,750	7,697	8,544	9,187
TEMPLES						
FLA	3,400	3,550	3,800	153	160	171
GRAPEFRUIT,WHITE SEEDLESS						
FLA	26,900	29,200	28,500	1,143	1,241	1,211
GRAPEFRUIT, COLORED SEEDLESS						
FLA	20,000	21,900	23,000	850	930	978
OTHER GRAPEFRUIT						
FLA	2,900	2,750	2,500	123	117	106
ALL GRAPEFRUIT						
ARIZ	2,200	1,500	1,300	70	48	42
CALIF 5/:						
DESERT	4,300	4,200	3,900	137	135	125
OTHER AREAS	5,000	4,700		168	158	
TOTAL	9,300	8,900		305	293	
FLA	49,800	53,850	54,000	2,116	2,288	2,295
TEX	1,925	3,800	4,500	77	152	180
U S	63,225	68,050		2,568	2,781	
TANGERINES						
ARIZ	700	450	500	26	17	19
CALIF	2,230	2,090	1,800	83	78	68
FLA	2,340	2,450	2,700	111	117	128
U S	5,270	4,990	5,000	220	212	215
LEMONS						
ARIZ	7,100	3,650	3,900	270	139	148
CALIF	21,500	17,000	18,500	817	646	703
U S	28,600	20,650	22,400	1,087	785	851
TANGELOS						
FLA	4,000	4,200	3,900	180	189	176

1/ THE CROP YEAR BEGINS WITH THE BLOOM OF THE FIRST YEAR SHOWN AND ENDS WITH YEAR HARVEST IS COMPLETED. 2/ NET LBS PER BOX: ORANGES-CALIF & ARIZ-75, FLA-90, TEX-85; GRAPEFRUIT-CALIF DESERT & ARIZ-64, CALIF OTHER-67, FLA-85, TEX-80; LEMONS-76; TANGELOS & TEMPLES-90; TANGERINES-CALIF & ARIZ-75, FLA-95. 3/ NAVEL AND MISCELLANEOUS VARIETIES IN CALIFORNIA AND ARIZONA. EARLY AND MID-SEASON VARIETIES IN FLORIDA AND TEXAS, INCLUDING SMALL QUANTITIES OF TANGERINES IN TEXAS. 4/ 1987-88 CROP REVISED. 5/ THE FIRST FORECAST FOR CALIF GRAPEFRUIT "OTHER AREAS" WILL BE AS OF APR 1.

DECEMBER HARVESTING PROGRESS

Cotton harvest was normal or ahead of normal early in December. Harvest was 92 percent complete, 7 points ahead of normal as of December 11. Most of the unharvested acreage was in New Mexico, Oklahoma, and Texas. Rain and snow slowed harvesting early in the month in those States. Snow, ice, and blowing sand reduced the quality of the unharvested crop in Texas. Soybean harvest was still in progress in the Delta, the Southeast, and portions of the eastern Corn Belt. By mid-month, soybean harvest was nearly complete except in the Southeast. Cotton harvest was nearly complete by the end of December. Producers in Arizona, California, and Texas began preparing for seeding the 1989 cotton crop late in the month. Soybean harvest was nearly complete in the Southeast at month's end.

DECEMBER WEATHER SUMMARY

Dryness continued along the southern Atlantic seaboard and in the winter wheat areas of the Great Plains. South Florida received the least amount of rainfall on record for the September to December period. Dryness also prevailed over the northern Atlantic seaboard, the western Corn Belt, and the interior of the Pacific Northwest. Winter storms brought near to above-normal precipitation into most of the Mississippi and Ohio Valleys. Heavy snow fell in the northern and central Rockies. Cold weather prevailed over the northern and central Intermountains Plateau while above-normal temperatures persisted in the central and southern Great Plains. (Prepared by the Joint USDA/NOAA Agricultural Weather Facility.)

WINTER WHEAT

Lack of moisture stressed winter wheat in the central and southern Plains during December. At mid-month, some reseeding occurred in Texas. Greenbug infestation was a continuing problem. By the end of the month, greenbugs were a problem as far north as Nebraska. Moisture improved conditions in eastern Kansas and the Texas Blacklands late in December. Early in the month, producers were concerned about lack of snow cover in the northern Plains and the Corn Belt. By month's end, snow cover was improved but still limited in some areas. Despite limited snow cover in Colorado and Montana, wind damage was light. Russian wheat aphids were a problem in Oregon and Washington during most of the month. Storms slowed seeding in California during the latter half of December. Winter wheat was mostly good to fair in the Southeast. Seeding was nearly complete by month's end.

COTTON: All cotton production is forecast at 15.4 million bales, up 5 percent from 1987 and up 2 percent from the December 1 forecast. This is the highest production since 1981 when 15.6 million bales were produced. The Upland production is expected to total 15.1 million bales and American-Pima production a record high 3.38 thousand bales. Total area harvested is expected to total 11.9 million acres, up 18 percent from last year and up 2 percent from the December estimate. Yields are expected to average 623 pounds per harvested acre, down 83 pounds per acre from 1987's record, and down 4 pounds from December.

Upland cotton production in Texas and Oklahoma is expected to total 5.49 million bales, up 10 percent from last year and up 6 percent from December. Good progress was made harvesting remaining acreage with good yields and good harvest conditions.

The Delta States (Arkansas, Louisiana, Mississippi, Missouri, and Tennessee) expect to produce 4.73 million bales, 3 percent above last year and unchanged from December. A decrease in production for Mississippi was offset by an increase in Missouri and Tennessee.

Production in the Western States (Arizona, California, and New Mexico) is expected to total 3.82 million bales of Upland cotton, down 3 percent from last year and 2 percent below the December forecast. During the month of December, California growers were busy shredding and discing remaining fields to comply with the State's pink bollworm quarantine law. Only a few fields in the desert areas were still being harvested.

The Southeastern States (Alabama, Georgia, North Carolina, and South Carolina) are expected to harvest 1.03 million bales, up 10 percent from last year and 2 percent above December. Weather conditions were favorable during the month of December for completion of cotton harvest.

Bureau of the Census reports 14,276,182 running bales ginned prior to January 1, compared with 13,273,932 bales to the same date last year and 8,588,206 bales in 1986.

COTTONSEED: Production for the 1988 crop, based on a three year average lint-seed ratio, is forecast at 6.05 million tons, 5 percent above the 1987 production of 5.77 million bales.

ORANGES: U.S. all orange production is forecast at 215 million boxes, virtually unchanged from December 1 but 7 percent more than last season. All oranges in Florida are forecast at 150 million boxes, unchanged from December 1 but 9 percent greater than last season's crop. Early and mid-season varieties in Florida, at 89.0 million boxes, are the same as the December 1 forecast but 13 percent greater than last season. Harvest of early's and mid's is 33 percent complete as compared with 28 percent a year earlier. The Florida Valencia forecast is 61.0 million boxes, unchanged from December 1 but 3 percent above last season.

The California all orange crop is forecast at 61.0 million boxes, unchanged from December 1 but 4 percent greater than last season. The California Navel crop, at 35.0 million boxes, is the same as December 1 but 11 percent more than the crop harvested in 1987-88. Navel harvest in California is about 19 percent complete. The forecast for the California Valencia crop, at 26.0 million boxes, is unchanged from December and 5 percent below last season.

Arizona's all orange forecast, at 2.00 million boxes, is down 17 percent from the previous forecast but 10 percent above last season. The Texas all orange crop is forecast at 1.75 million boxes, unchanged from the last forecast but 22 percent above last season.

Changes in U.S. production between the January 1 forecast and final production have averaged 15.9 million boxes over the past ten seasons, ranging from 680 thousand boxes in 1982-83 to 43.2 million boxes in 1981-82. A freeze in Florida during January 1982 was the major cause for the 43.2 million box difference between the January 1, 1982 forecast and final production for 1981-82.

FLORIDA FROZEN CONCENTRATED JUICE YIELD: The 1988-89 forecast of yield for all Frozen Concentrated Orange Juice for Florida is 1.50 gallons per box at 42.0 degrees Brix. The forecast is projected to estimate the final yield as reported by the Florida Citrus Processors Association. The 1987-88 yield for all fruit used in FCOJ was a record high 1.55342 gallons per box at 42.0 degrees Brix.

GRAPEFRUIT: The U.S. prospects for the 1988-89 season, including California's "Desert" grapefruit but excluding California's "Other Areas" grapefruit, indicates a crop of 63.7 million boxes, 1 percent above the *previous season but unchanged from the December 1 forecast. Production for* the California "Other Areas" crop, which will be forecast as of April 1, 1989, accounted for 4.70 million boxes last season. The California "Desert Valley" crop forecast is 3.90 million boxes, 7 percent below last season. The Florida all grapefruit forecast is 54.0 million boxes -- unchanged from the December 1 forecast and virtually the same as last season. Harvest in Florida is 19 percent complete. Arizona's forecast is 1.30 million boxes, 13 percent below last season. In Texas, the forecast is 4.50 million boxes, 18 percent above last season and 134 percent greater than the 1986-87 season of 1.93 million boxes.

LEMONS: Production in Arizona and California is expected to total 22.4 million boxes, down 1 percent from the previous forecast but 8 percent above last season's utilized production. California's forecast continues at 18.5 million boxes, 9 percent above the 1987-88 season. Freezing temperatures occurred in all three lemon districts during the last week of December. Damage was mostly light but some low lying groves experienced heavier damage. The crop reduction caused by the frost is expected to be minimal because much of the fruit had already been picked in the worst affected areas. More fruit will be diverted to processed products because of the freezing temperatures. Harvest is 27 percent complete in California.

The Arizona forecast is 3.90 million boxes, down 7 percent from the previous forecast but 7 percent above last season's utilized crop. The four to five nights of freezing temperatures the last week of December should not have any significant effect on the Arizona lemon crop since 80 percent had been harvested by January 1.

TANGELOS: The Florida crop, excluding K-early citrus fruit, at 3.90 million boxes, is unchanged from December 1 but 7 percent below the 1987-88 crop. Harvest is 57 percent complete.

TANGERINES: The U.S. production forecast is 5.00 million boxes, down 1 percent from the previous forecast but virtually unchanged from last season's utilized crop. Harvest remains active in Florida, Arizona, and California. Fruit size in California is reported normal to small with quality good to average.

The Florida forecast is 2.70 million boxes, unchanged from December 1 but 10 percent above 1987-88. The forecast for all Florida tangerines includes Robinson, Dancy, and Honey tangerines. The California crop forecast remains at 1.80 million boxes but is down 14 percent from last season. The Arizona crop forecast is 500 thousand boxes, 9 percent below the previous forecast but 11 higher than the 1987-88 utilized production.

TEMPLES: The Florida forecast is 3.80 million boxes, unchanged from December 1 but 7 percent above last season. Harvest is just starting.

ARIZONA CITRUS: The State experienced five nights of freezing weather the last week of December. Freezing temperatures occurred in both the Phoenix and Yuma areas, the only two citrus production areas of the State. Depending upon location in Yuma, crops were exposed to 18 to 25 hours of below-freezing temperatures. Lowest temperature in Yuma was 27. Temperatures were colder than that in rural areas of Phoenix.

Measures were taken to protect the fruit, such as irrigating, running wind turbines, etc. It is the general opinion that it will be several weeks before any accurate damage assessment can be made.

CALIFORNIA CITRUS: The Navel orange harvest was active with smaller than normal sizes being reported. Harvest was slow in the morning hours due to wet, foggy conditions. Harvesting of Desert lemons, grapefruit, and tangerines gained momentum. At month's end, low nighttime temperatures threatened the citrus crop. Sprinklers, wind machines, and smudgepots were being used to keep temperatures up. No major damage was reported.

FLORIDA CITRUS: Most of this State's groves were in good condition through December. Rainfall was generally less than normal in all citrus areas which has caused a lot of caretakers to irrigate hoping to prevent fruit softening. There was a general frost across the citrus belt on the morning of December 19th. However, the low temperatures did not last long enough to do significant fruit or foliage damage. Some new leaves were burned and will drop off, but new leaves will rapidly grow as there was virtually no twig or stem damage. Harvest of early oranges was exceeding 5.50 million boxes per week by the second week of December. Grapefruit movement averaged more than a million boxes weekly during the month. Harvest of Dancy tangerines and Orlando tangelos showed strong fresh movement for Christmas fresh fruit trade. Caretakers were very active this month cultivating cover crops.

PAPAYAS: Hawaii fresh papaya production is forecast at 5.00 million pounds for January, 25 percent higher than January 1988. Output is anticipated to dip to 4.50 million pounds in February. The March forecast is for 4.60 million pounds followed by an increase in April to 5.10 million pounds.

December 1988 fresh utilization is estimated at 5.48 million pounds, 2 percent less than November and 9 percent lower than last December. Total 1988 fresh sales were virtually unchanged from 1987.

Weather conditions were variable during December. Major production areas experienced a mixture of sunshine and light to moderate showers during the first half of the month. Conditions were unfavorable during the latter half of December with occasional heavy showers and strong winds.

Crop area totaling 4,605 acres for December 1988, was 1 percent higher than November and 11 percent higher than last December. Area harvested totaled 2,380 acres, 3 percent more than November 1988 and 6 percent more than December 1987.

HAY STOCKS ON FARMS: Hay stocks on farms totaled 90.9 million tons on December 1, 1988. This was 24 percent less than on hand a year earlier and 25 percent below the holdings on December 1, 1986. The lower stocks this year reflect the effect of drought last summer.

POTATOES: Winter potato production for 1989 is forecast at 2.74 million cwt, up 5 percent from last year and 10 percent above 1987. Harvest area is forecast at 12.8 thousand acres, a gain of 4 percent over 1988 and 9 percent above 1987. The average yield is expected to hit 214 cwt per acre, slightly above last year and the same as two years ago.

California acreage for harvest is up 6 percent from last year with yield expected to be 4 percent higher. Planting in Florida is nearly completed, but irrigation is being used on dry soils. Crop condition is mostly good, while favorable set and sizing is apparent.

SPRING POTATO FINAL: The final estimate of 1988 spring potatoes shows production at 20.0 million cwt, up 13 percent from 1987 and 1 percent above 1986 output. Harvested acreage stayed at 79.0 thousand acres, down 2 percent from 1987; while the average yield was found to be slightly larger than the June 1 forecast.

COTTON PRODUCTION AND ESTIMATES - A HISTORY

Cotton has played a major role in the development of America. From the planting of cotton in the gardens of Virginia settlers in 1607 to providing biological insulation suits for astronauts, cotton has been a "perennial patriot" in the growth of this country. It is considered the single most important textile fiber in the world, accounting for about 50 percent of total world fiber production.

Cotton is a perennial plant, though grown as an annual in the United States. There are two types of cotton grown in the U.S. Upland cotton, Gossypium Hirsutum, is the most prevalent type accounting for about 99 percent of the U.S. cotton crop. American-Pima or extra long staple (ELS) cotton, Gossypium Barbadense, is grown in west Texas, California, New Mexico, and Arizona. The first commercial American strain of ELS cotton was produced in 1912 in the Salt River Valley of Arizona and the Imperial Valley of California.

Upland cotton is grown throughout the U.S. Cotton Belt consisting of 17 States from Florida to California to Virginia. Major concentrations of production are in the Delta areas of Mississippi, Arkansas, and Louisiana; the Texas High Plains and Rolling Plains; central Arizona; and the San Joaquin Valley of California. The northern limit of cotton growth in the U.S. is established by a need for at least 200 days between killing frosts and a minimum average summer temperature of 77 degrees. Cotton's growing season of about 150 days is the longest of any annually planted crop in the country.

The fiber (lint) of cotton varies by type. Upland varieties usually range in staple length from 7/8 inch to about 1 1/4 inches while ELS lint generally ranges from 1 3/8 inches to 1 3/4 inches. ELS cotton is more desirable for high-value products such as sewing thread and expensive apparel items.

An often overlooked part of the crop is the vast amount of cottonseed that is produced along with the fiber. Annual cottonseed production averages 5 million tons. More than 5 billion pounds of cottonseed meal are used in feed for livestock, dairy cattle, and poultry. Two million gallons of cottonseed oil are used for food products ranging from margarine to salad dressing.

At the time Eli Whitney invented the cotton gin in 1793, cotton production was estimated at 10,000 bales. In 1789, the U.S. textile industry began in a small plant in Rhode Island and by 1847, more people worked in textiles than in any other industry. Production ranged from about 2 million bales in 1866 to a record high in 1937 of 18.9 million bales. Since 1937, U.S. production has averaged over 12.4 million bales a year, fluctuating from a low of 7.4 million bales in 1967 to a high of 15.6 million bales in 1981. While government programs and prices of cotton and competing crops have influenced acreage, weather has been the chief determinent of year-to-year variability in yields.

With the completion of the transcontinental railroad in 1869, the Cotton Belt began to move westward. By 1880, Texas had become the chief cotton producing State. Since 1882, Texas has been the leading cotton State with the exceptions of 1974 and 1982 when California was the leading State.

U.S. cotton production continued to shift westward until 1979 when the Southwest (Texas and Oklahoma) and the West (Arizona, New Mexico, and California) accounted for 75 percent of the total production. Since 1979, the Southeastern and Delta States have regained a small portion of the share of production lost to the westward expansion. In 1987, Southeastern and Delta States accounted for 38 percent of total production and the Southwest and West accounted for 62 percent.

After the Civil War, cotton acreage expanded steadily from about 5 million acres to a record high 44.6 million in 1926. It then declined to about 14 million acres in the mid-1960's and to 10.4 million in 1987.

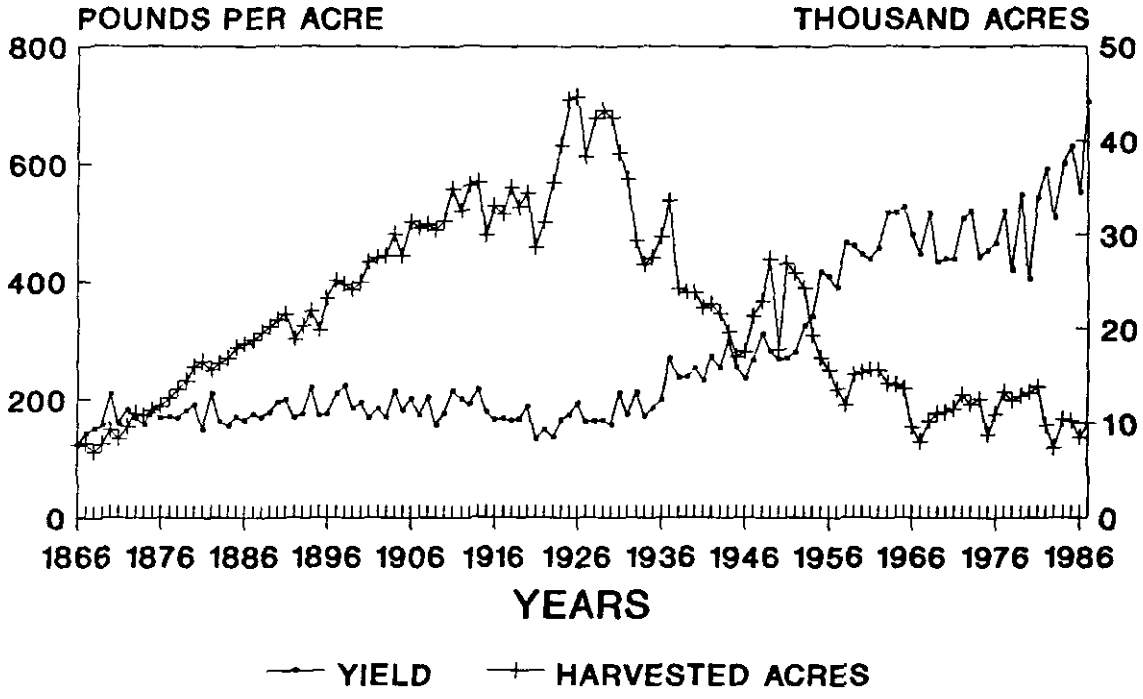
During the 1866-1930 period, cotton yields averaged about 180 pounds per harvested acre and rarely exceeded 200 pounds. From 1930 to the mid-1960's, acreage trended down but yields moved upward. An uptrend, beginning in 1937, boosted yields above 200 pounds. They exceeded 300 pounds in 1948, 400 pounds in 1955, and 500 pounds in 1965. Since 1965, yields have fluctuated considerably but reached a record high in 1987 of 706 pounds per harvested acre. Increases in yields can be attributed to more of the crop being grown on land well adapted to cotton, to improved technology and management, and to a larger proportion of the crop being produced on irrigated land.

In 1987, cotton ranked fifth ($4.6 billion) among the major field crops in value of farm production following corn ($12.1 billion), soybeans ($10.4 billion), baled hay ($9.1 billion), and wheat ($5.4 billion). Cotton acres harvested represented over 3 percent of U.S. total acreage of principal crops harvested. In an average year, the crop covers some 12 million acres or nearly 19,000 square miles. That is roughly equivalent to the combined land areas of Vermont, New Hampshire, and Rhode Island. The number of farms harvesting cotton have declined drastically over the years while the average harvested acreage per farm has increased. For example, in 1949 1.1 million farms harvested an average of 24 acres of cotton each. By 1982, only 38,000 farms harvested cotton but the average acreage harvested had increased to 256.

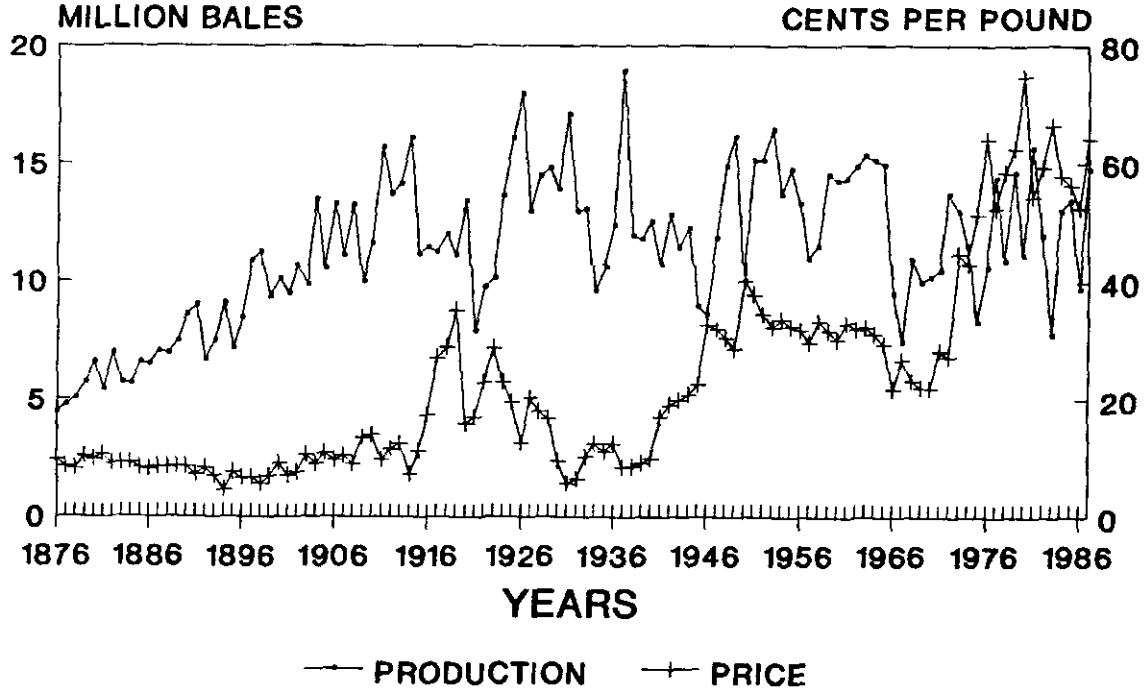
The following three charts depict cotton acreage, production, yield, and price over time. The fourth chart shows Upland cotton record high yields by State. From 1969 to date, cotton production is estimated in 480-pound net weight bales. Prior to 1969, production was estimated in 500-pound gross weight bales.

(Based on "The U.S. Cotton Industry," Agricultural Economic Report 567, by Irving R. Starbird, Edward H. Glade, Jr., W. C. McArthur, Fred T. Cooke, Jr., and Terry Townsend, June 1987, and information provided by the National Cotton Council.)

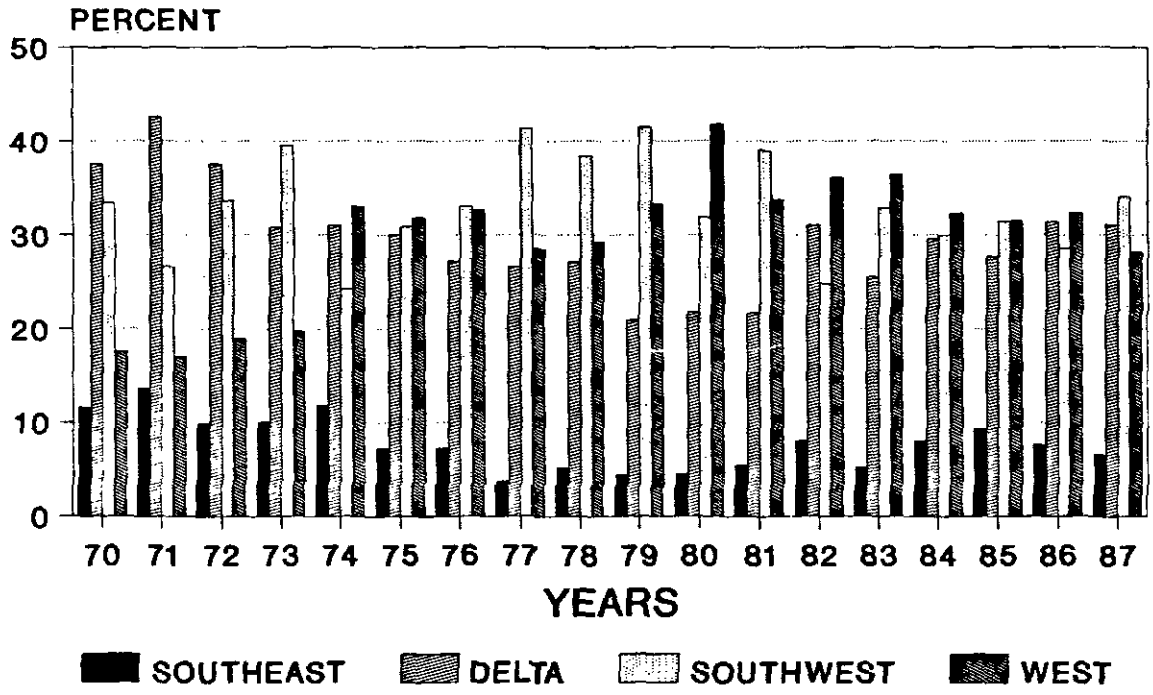
U. S. ALL COTTON, 1866 - 1987
YIELD AND AREA HARVESTED



U.S. ALL COTTON, 1876 - 1987
PRODUCTION AND PRICE



A COMPARISON OF ALL COTTON PRODUCTION BY REGIONS



UPLAND RECORD HIGH YIELDS

POUNDS PER HARVESTED ACRE AND YEAR