

KINGS COUNTY DEPARTMENT OF AGRICULTURE

** PERSONNEL **

AGRICULTURAL COMMISSIONER-SEALER OF WEIGHTS AND MEASURES M. HUGH HANDLEY

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CROP REPORT COVER: Cotton - Kings County's top crop. (See enclosed story)

(Photo courtesy of Salyer American)



KINGS COUNTY DEPARTMENT OF AGRICULTURE

M. HUGH HANDLEY

AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS
AND MEASURES

P. O. BOX C - 280 CAMPUS DRIVE

HANFORD, CALIFORNIA 93230

(209) 582-3211

April 1, 1986

Mr. Clare Berryhill, Director
California Department of Food and Agriculture
and
The Honorable Board of Supervisors
County of Kings

Gentlemen:

It is my pleasure to submit this 1985 Agricultural Crop Report, which was compiled in accordance with Section 2279 of The California Food and Agricultural Code.

The gross value of agricultural crops and products in Kings County during the calendar year 1985, was \$552,466,000., a decrease of over \$17,000,000. (3.1%) from 1984.

The majority of crops reflected declining values, due to lower prices received for the commodities.

However, vegetable and seed crops and market milk increased in values, due to increased acreage and/or production.

Cotton, Kings County's leading crop continues to maintain its lead with a value of over 202 million dollars, including seed.

All figures in this report are gross returns and do $\underline{\text{not}}$ indicate net profit received by growers.

This report could not have been possible without the many individuals and organizations who contributed their time and information. A special thanks is expressed to Buzz Felleke and Denise Dossey of my staff, who compiled the report.

Respectfully submitted,

M. Hugh Handley

Agricultural Commissioner

Sealer of Weights and Measures

MHH:dod

COTTON

Cotton is the most important textile material in the world. Although not as well known, the cotton plant produces a greater quantity of food for man and feed for livestock than it does of the fiber that bears its name. Cotton has been grown for its fiber for several thousand years. Its cultivation and manufacture into cloth developed independently in both the Eastern and Western hemispheres. The oldest records of cotton textiles was found in Pakistan dating back about 5,000 years and in Peru some cotton cloth had been found to be as old as 4,500 - 7,000 years. Cotton fabrics have also been found in the remains of some of the ancient civilization of Egypt and in the ruins of the Indian Pueblos of Southwestern United States, dating back hundreds of years before Christ.

Cotton is woven into the pattern of American history as is no other fiber. It was recorded that the settlers in Virginian planted their first garden in 1607. In the late 17th. Century, Virginians were cultivating enough for their own use and exporting to other colonies. The American Revolution brought a marked change. It lifted many burdensome governmental restrictions from both agriculture and industry and gave each individual the opportunity to develop to the extent of his initiative and ability. The two important events that changed the industry was one in 1790 when Samuel Slater established the first successful textile mill in the United States at Pawtucket, Rhode Island. The other was the invention of the cotton gin by Eli Whitney in 1793 on the General Nathaniel Green Plantation near Savannah, Georgia. The 19th. Century was marked by steady expansion of American cotton production from a limited area along the Atlantic Caast, moved westward to the Mississippi River and to the western states and now 30% of the cotton is produced by the three western states.

Cotton is believed to have been successfully grown in Kings County as early as 1909. The first cotton planted in Kings was of the Durango variety. J.H. Whitley of the Security Land and Loan Company, founder of the City of Corcoran, sent some cotton seed to Kings grower, D.W. Lewis and J.A. Firebaugh, these gentlemen are credited with growing a few plants near Corcoran. Due to the lack of gins in the county, production of cotton was restricted, but in 1919 J.G. Boswell built the first cotton gin in Corcoran. That caused the cotton acreage to increase in the county. Today Kings County has one of the most modern cotton gins in the world and the acreage has increased to 267,112 in 1985.

The world faces an increasing need for food-grade protein. American's cotton industry is moving to help meet this new challenge. Recently developed varieties of glandless cotton are a promising new source of high-quality protein. Research is continuing in this and other areas to assure that -cotton - one of America's earliest crops - helps the nation in meeting the challenges of tomorrow. One of the challenges for Kings County growers is the high cost of growing cotton and a very high competitive foreign market. The future picture of cotton might change due to this challenge that is facing Kings County growers.

ANNUAL CROP REPORT FOR YEAR 1985

KINGS COUNTY DEPARTMENT OF AGRICULTURE

M. HUGH HANDLEY AGRICULTURAL COMMISSIONER SEALER OF WEIGHTS AND MEASURES

VIIVOO OOMATII
KINGS COUNTY BOARD OF SUPERVISORS
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COUNTY ADMINISTRATIVE OFFICER
MILTON D. McCOY

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KINGS COUNTY RAINFALL DATA. BACKCOVER

-1-FIELD CROPS

			PRODU			VALUE		
CROP	YEAR	HARVESTED ACREAGE	PER	TOTAL	UNIT	PER UNIT	TOTAL	
Barley	1985 1984	25,039 18,621	1.92 1.75	48,075 32,587	Ton Ton	\$ 101.00 128.00	\$ 4,856,000 4,171,000	
Corn	1985 1984	13,998 13,090	4.16 4.43	58,232 57,989	Ton Ton	118.00 122.00	6,871,000 7,075,000	
Cotton Lint	1985 1984	267,112 267,292	2.18 2.00	582,305 534,584	495-lb. Bale	304.00 351.00	177,021,000 187,639,000	
Cotton Seed	1985 1984			240,201 220,515	Ton Ton	105.00 117.00	25,221,000 25,800,000	
Cotton Planting Seed	1985 1984			2,674 2,901	Ton Ton	165.00 145.00	417,000 421,000	
Hay Alfalfa	1985 1984	25,461 26,006	8.53 7.96	217,182 207,007	Ton Ton	74.00 80.00	16,071,000 16,561,000	
Grain	1985 1984	660 565	5.00 4.00	3,300 2,260	Ton Ton	60.00 65.00	198,000 147,000	
Pasture Irrigated	1985 1984	12,000 13,000			Acre Acre	105.00 108.00	1,260,000 1,404,000	
Range	1985 1984	170,000 223,000				2.00 2.00	340,000 446,000	
Other	1985 1984	45,000 48,000			Acre	17.00 18.00	765,000 864,000	
Safflower	1 98 5 1984	11,723 21,865	1.25 0.93	14,654 20,334	Ton Ton	250.00 275.00	3,664,000 5,592,000	

Screenings	1985 1984			1,764 2,537	Ton	\$ 42.00 43.00	\$ 74,000 109,000
Silage	1985	13,998	18.42	257,843	Ton	16.00	4,125,000
Corn	1984	9,981	21.00	209,601	Ton	15.00	3,144,000
Other	1985	1,132	20.00	22,640	Ton	15.00	340,000
	1984	860	16.00	13,760	Ton	14.00	193,000
Sorghum Grain	1985	2,100	2.13	4,473	Ton	110.00	492,000
	1984	1,846	2.48	4,578	Ton	113.00	517,000
Dry Beans	1985	653	1.28	836	Ton	405.00	339,000
	1984	1,946	1.02	1 , 985	Ton	576.00	1,143,000
Sugar Beets	1985	1,107	24.60	27,232	Ton	33.00	899,000
	1984	1,622	23.76	38,539	Ton	33.00	1,272,000
Wheat	1985	57,206	3.15	180,198	Ton	106.00	19,102,000
	1984	51,962	3.14	163,161	Ton	123.00	20,069,000
TOTAL	1985 1984	647,189 700,927					\$262,055,000 \$277,163,000

FIELD CROPS - Cont'd
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CROP	YEAR	UTILIZATION	ACRE BEARING	AGE NON BEARING	PRODU PER ACRE	JCTION TOTAL TONS	PER TON	/ALUE TOTAL
Almonds	1985 1984	Dried Dried	3,676 3,872	76 116	•59 •94	2,169 3,640	\$ 1,180.00 1,700.00	\$ 2,559,000 6,188,000
Almonds - Hulls	1985 1984					1,150 1,930	65.00 65.00	75,000 125,000
Apricots	1985 1984	Fresh Proc. Total Fresh Proc. Total	230 236	30 47	5.66 7.84	900 402 1,302 1,250 600 1,850	744.00 210.00 773.00 258.00	670,000 84,000 754,000 966,000 155,000
Grapes Raisin Varieties	1985	Fresh Dried Crushed Cannery Total	2,281	81		834 3,057 12,341 744 16,976	594.00 710.00 86.00 180.00	495,000 2,170,000 1,061,000 134,000 3,726,000
Grapes Raisin Varieties	1984	Fresh Dried Crushed Total	2,379	82		836 3,064 13,110 17,010	522.00 845.00 115.00	436,000 2,589,000 1,508,000 4,533,000
Wine Varieties	1985 1984	Crushed Crushed	1,117	301 301	11.90 8.75	13,292 9,774	74.00 100.00	984,000 977,000
Table Varieties	1985 1984	Fresh Fresh	122 122	83 83	9.07 10.80	1,107 1,318	608.00 866.00	673,000 1,141,000
Total - All Grapes	1985 1984		3,520 3,618	465 466				5,377,000 6,651,000
Kiwi	1985 1984	Fresh Fresh	197 178	131 101	5.52 5.47	1,087 974	1,866.00 2,264.00	2,028,000 2,205,000
Nectarines	1985 1984	Fresh Fresh	1,285 1,187	258 271	4.60 7.87	5,911 9,342	751.00 378.00	4,439,000 3,531,000

Olives	1985 1984		1,142 1,146	0	4.10 4.06	4,682 4,653	\$ 591.00 533.00	\$ 2,767,000 2,480,000
Peaches Clingstone	1985 1984	Processed Processed	1,353 1,293	175 160	17.90 20.00	24,218 25,860	180.00 182.00	4,359,000 4,707,000
Freestone	1985	Fresh Proc. Total	1,428	430		0.252	F26, 00	4 400 000
	1984	Fresh Processed			5.78	8,253	536.00	4,423,000
		Total	1,378	404	9.40	12,953	357.00	4,624,000
Total - All Peaches	1985 1984		2,781 2,671	605 564		37,171 38,813		8,783,000 9,331,000
Pistachios	1985 1984	Dried Dried	2,874 2,674	2,359 1,326	.49 1.15	1,408 3,075	3,232.00 2,300.00	4,551,000 7,073,000
Plums	1985 1984	Fresh Fresh	1,686 1,486	395 504	5.14 5.70	8,666 8,470	500.00 336.00	4,333,000 2,846,000
Pomegranates	1985 1984	Fresh Fresh	154 189	10	7.61 4.85	1,172 917	360.00 404.00	422,000 370,000
Walnuts	1985 1984	Dried Dried	5,082 5,016	835 882	1.62 1.66	8,233 8,326	683.00 7 4 7.00	5,623,000 6,220,000
Miscellaneous <u>a</u> /	1985 1984		297 226	56 165				490,000 225,000
TOTAL	1985 1984		24,277 22,499	5,385 4,452				46,070,000 48,366,000

a/ Pears, Pecans, Persimmons, Prunes, Quince

FRUIT AND NUTS CROPS - Cont'd.

-5-VEGETABLE CROPS

CROP	YEAR	UTILIZATION		UCTION IED PER E ACRE	TOTAL	UNIT	VA PER UNIT	ALUE TOTAL
Cantaloupes	1985	Fresh	1,434	571.00	818,814	40 lb. Crate	\$ 3.48	\$ 2,849,000
	1984	Fresh	1,158	442.00	511,835	40 lb. Crate	4.13	2,114,000
Lettuce	1985	Fresh	772	764.00	589.808	43 lb. Carton	5.57	3,285,000
	1984	Fresh	729	752.00	548,208	43 lb. Carton	5.60	3,070,000
Onions	1985	Processed	630	17.50	11,025	Ton	125.00	1,378,000
	1984	Processed	960	17.55	16,848	Ton	72.00	1,213,000
Tomatoes	1985	Processed	1,330	26.30	35,000	Ton	51.40	1,799,000
	1984	Processed	2,200	28.70	63,140	Ton	52.00	3,283,000
Tomatoes	1985	Fresh	2,149	19.17	41,196	Ton	146.00	6,015,000
	1984	Fresh	344	16.00	5,504	Ton	320.00	1,761,000
Watermelons	1985	Fresh	90	17.00	1,503	Ton	79.00	121,000
	1984	Fresh	184	21.00	3,864	Ton	77.00	289,000
Miscellaneous <u>a</u> /	1985 1984		3,968 2,523					10,623,000 3,588,000
TOTAL	1985 1984		10,373 8,098					26,070,000 \$15,327,000

a/ Asparagus, Bell Peppers, Casaba melons, Carrots, Chinese Cabbage (NAPA), Crenshaw melons, Cucumbers, Eggplant, Garbanzo Beans, Garlic, Onions, Persian melons, Potatoes, Radishes, Snap Beans, Squash, Sweek Corn, Strawberries.

M. HUGH HANDLEY
AGRICULTURAL COMMISSIONER-SEALER

SEED CROPS

			PROI	DUCTION		VAI	LUE
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
Certified Seed	1985	24,116	652	15,723,632	lb.	\$ 1.04	\$ 16,353,000
Alfalfa	1984	22,404	784	17,564,736	lb.	1.11	19,497,000
Barley	1985	1,313	5,520	7,247,760	lb.	0.09	652,000
•	1984	911	6,578	5,992,558	lb.	0.07	419,000
Wheat	1985	14,172	7,340	104,022,480	lb.	0.08	8,842,000
	1984	7,762	5,954	46,214,948	lb.	0.08	3,697,000
Safflower	1985	589	2,540	1,496,060	lb.	0.65	972,000
Other Seed							
Lettuce	1985	152	563	85 , 576	lb.	4.10	351,000
	1984	305	365	111,325	lb.	3.62	403,000
Uncertified Alfalfa	1985	1,196	652	779,792	lb.	1.00	780,000
	1984	1,972	784	1,546,048	lb.	1.08	1,670,000
Miscellaneous a/	1985	293					251,000
<u> -</u>	1984	478					417,000
TOTAL	1985	41,831					\$ 28,201,000
	1984	33,832					26,103,000

a/ Bell Peppers, Blackeye Beans, Chili Peppers, Eggplant, Flowers, Nursery-Misc. Products, Radishes and Watermelons

INVENTORIES OF LIVESTOCK & POULTRY (In Number of Head)

	January 1, 1985	January 1, 1986
Milk Cows 2 Years and Over	65,500	76,000
Cattle and Calves On Feed	5,000	4,000
Other Cattle and Calves	53,000	135,000
Total	123,500	215,000
Sheep and Lambs	17,500	11,000
Hogs and Pigs	400	350
Hens and Pullets	164,596	98,000

LIVESTOCK AND POULTRY

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M. HUGH HANDLEY
AGRICULTURAL COMMISSIONER-SEALER

		PRODUC	TION		VA	LUE	
ITEM	YEAR	NO. OF HEAD	TOTAL LIVEWEIGHT	UNIT	PER UNIT		TOTAL
Cattle & Calves	1985 1984	137,915 153,220	843,929 906,621	Cwt. Cwt.	\$ 50.34 \$ 64.40	\$ \$	42,483,000 58,386,000
Sheep & Lambs	1985 1984	16,000 21,088	17,600 22,142	Cwt. Cwt.	70.00 65.00		1,232,000 1,439,000
Hogs & Pigs	1985 1984	1,060 1,160	223,200 247,892	lb. lb.	.48 .56		112,000 139,000
Turkeys	1985 1984	1,282,233 1,394,342	29,619,582 32,069,866	lb. lb.	.46 .44		13,625,000 14,111,000
Miscellaneous <u>a</u> /	1985 1984						1,798,000 1,576,000
TOTAL	1985 1984					\$	59,250,000 75,673,000

a/ Geese, Fryers, Chickens-Unspecified, Eggs-Chicken, and Fish - Catfish

LIVESTOCK AND POULTRY PRODUCTS

				VALUE	
ITEM	YEAR	PRODUCTION	UNIT	PER UNIT	TOTAL
Milk					
Market	1985	10,597,000	Cwt.	\$ 12.00	\$ 127,164,000
	1984	9,493,000	Cwt.	12.73	120,846,000
Manufacturing	1985	16,000	Cwt.	\$ 11.06	177,000
-	1984	27,000	Cwt.	14.04	325,000
Wool	1985	116,000	lb.	.65	115,000
	1984	219,315	lb.	•90	197,000
TOTAL	1985				\$ 127,456,000
	1984				121,368,000

APIARY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	PER UNIT	TO	TAL
Honey	1985 1984	2,130,264 6,000,080	lb.	.60 .60	\$	1,278,000 3,601,000
Beeswax	1985 1984	88,761 100,018	lb.	1.00 1.15		89,000 115,000
Pollination	1985 1984	88,761 100,018	Colonies Colonies	22.50 20.00		1,997,000 2,000,000
TOTAL	1985 1984				\$	3,364,000 5,716,000
			1985 CROP SUMMARY	Υ		
Field Cro	ps		\$ 262,055,000	Seed Crops	\$	28,201,000
Fruit and	Nut Crops		\$ 46,070,000	Vegetable Crops	\$	26,070,000
Livestock	and Poultry		\$ 59,250,000	Apiary Products	ş	3,364,000
Livestock	and Poultry	Products	\$ 127,456,000			
GRAND TOT	'AL				\$!	552,466,000

KINGS COUNTY
DEPARTMENT OF AGRICULTURE
280 CAMPUS DRIVE
HANFORD, CALIFORNIA 93230

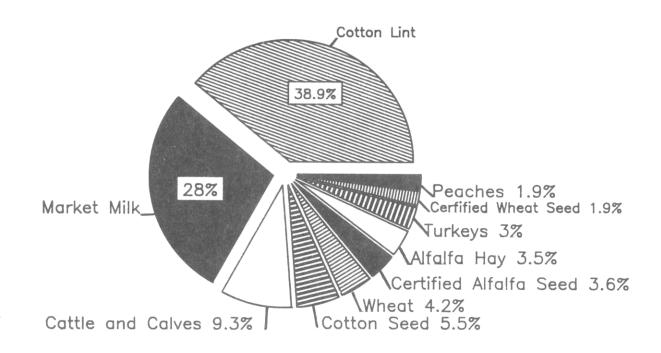
HANFORD, CALIFORNIA 93230 5 YEAR COMPARISON OF ACREAGE AND CROP VALUES

M. HUGH HANDLEY
AGRICULTURAL COMMISSIONER-SEALER

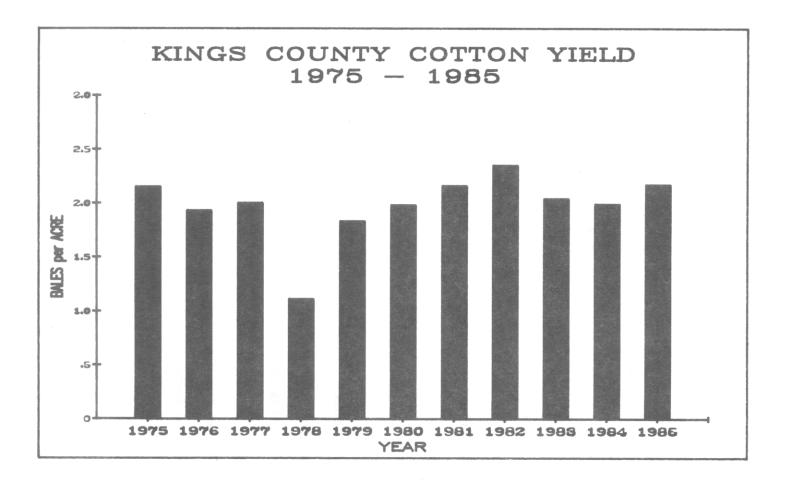
	1981	1982	1983	1984	1985
Field Crops	\$341,677,342	\$314,372,000	\$228,929,000	\$277,163,000	\$262,055,000
Acreage	888,075	793,025	603,000	700,927	647,189
Fruit and Nut Crops	34,396,194	43,045,000	41,719,000**	48,366,000	46,070,000
Acreage	19,562	19,641	31,981**	22,499	24,277
Livestock and Poultry	63,191,475**	64,295,000	62,153,000	75,673,000	59,250,000
Livestock and Poultry					
Products	103,482,220**	110,033,000**	112,268,000	121,368,000	127,456,000
Seed Crops	32,423,350	35,388,000	18,095,000	26,103,000	28,201,000
Acreage	42,901	52,228	25,994	33,832	41,831
Vegetable Crops	18,769,000	17,022,000	24,074,000	15,327,000	26,070,000
Acreage	7,268	9,005	10,061	8,098	10,373
Apiary Products	4,257,112	6,167,000	4,572,000	5,716,000	3,364,000
TOTALS	\$598,200,789	\$590,420,000**	\$491,860,000**	\$569,716,000	\$552,466,000

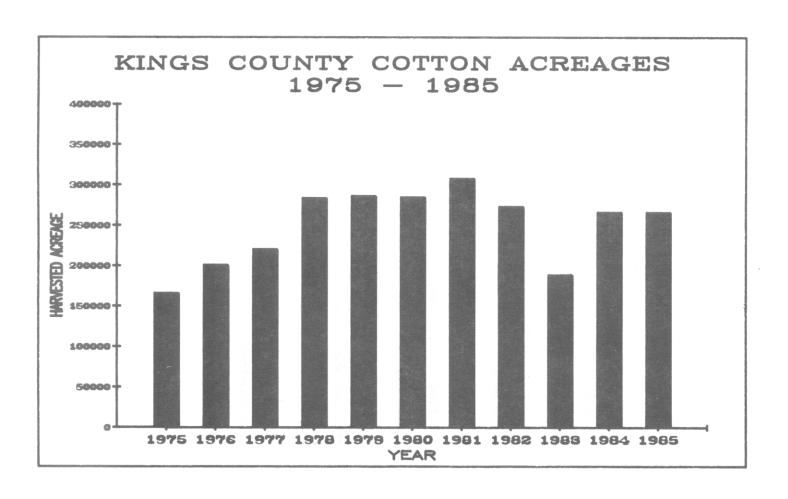
^{**}Revised

TOP TEN CROPS OF KINGS COUNTY FOR 1985

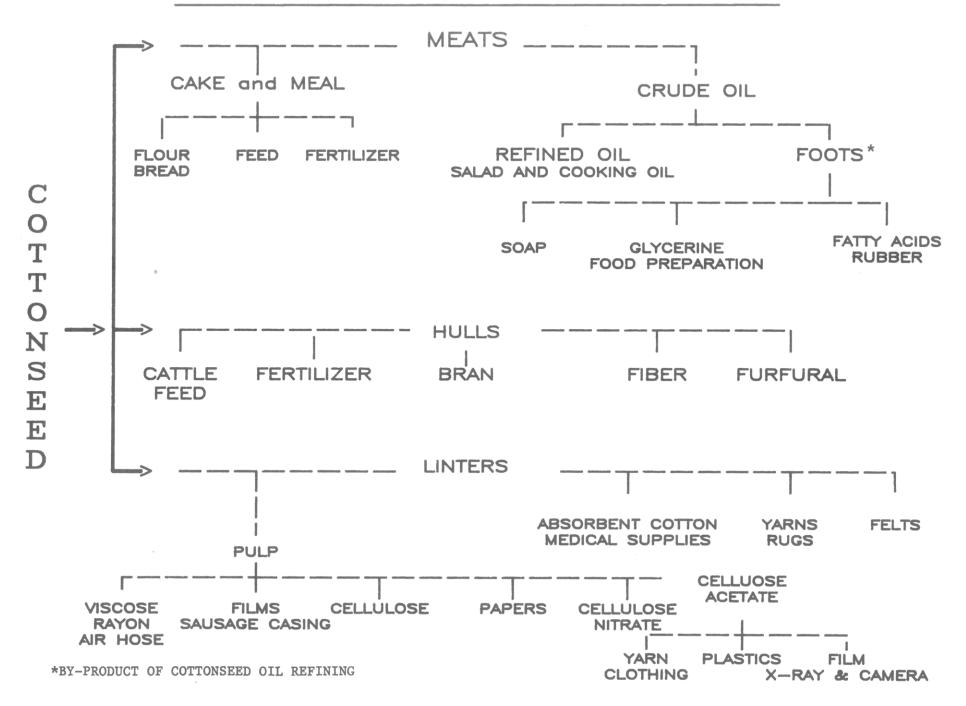


MILLION DOLLAR CROPS - 1985								
Cotton Lint	\$ 177,021,000	Plums	\$ 4,333,000					
Market Milk	127,164,000	Corn Silage	4,125,000					
Cattle and Calves	42,483,000	Safflower	3,664,000					
Cotton Seed	25,221,000	Lettuce	3,285,000					
Wheat	19,102,000	Cantaloupe	2,849,000					
Certified Alfalfa Seed	16,353,000	Olives	2,767,000					
Alfalfa Hay	16,071,000	Almonds	2,559,000					
Turkeys	13,625,000	Kiwi	2,028,000					
Certified Wheat Seed	8,842,000	Pollination	1,997,000					
Peaches	8,783,000	Processed Tomatoes	1,799,000					
Corn	6,871,000	Processed Onion	1,378,000					
Fresh Tomatoes	6,015,000	Honey	1,278,000					
Walnuts	5,623,000	Irrigated Pasture	1,260,000					
Grapes	5,377,000	Sheep and Lambs	1,232,000					
Barley	4,856,000							
Pistachios	4,551,000							
Nectarines	4,349,000							





COTTONSEED AND ITS MANY USES



GENERAL KINGS COUNTY INFORMATION

County Seat Hanford

County Population (1981) 74,200

Population per Square Mil 52.9

Total Assessed Value \$1,748,615,339

Land Area (Square Miles) 1,396

Total Acres 918,790

Number of Farms (1982) 1,187

Land in Farms (Acres - 1986) 816,228

Total Cropland (Acres - 1982) 613,693

Irrigated Cropland (Acres - 1982) 554,114

Total Agricultural Work Force 7,190

Public Ownership of Land (Acres):

Federal 30,974 (3.5%)
State 3,453 (.4%)
County & City 9,951 (1.1%)
School & Special Districts 4,426 (.4%)

Agricultural production ranked 11th among California counties and 16th among U.S. counties (Based on 1983 total value.)

Railroads - Santa Fe, Southern Pacific

Major Roads - Interstate 5, Highway 41, Highway 43 & Highway 198

Water Sources - Kings River, Tule River, Kaweah River, Kern River California Aquaduct

Elevation - 225 to 250 feet above sea level (800 feet in the Kettleman Hills)

Average length of growing season: 257 days

Average date of last spring frost: March 3

Average climate: 196 sunny clear days, 74 partly cloudy days

95 cloudy days

Average date of first fall frost: November 18

AGC1

Hanford, California Rainfall Table

1934-35 0.00 0.00 0.00 0.00 0.61 2.60 1.84 2.50 1.72 2.06 2.05 0.00 0.00 8.56 1935-37 0.00 0.00 0.00 0.00 0.00 1.84 0.00 2.81 1.487 0.97 0.55 0.00 8.56 1.99 1.90 1.57 1.973-38 2.00 0.00 0.00 0.00 1.11 2.12 2.16 1.76 3.51 4.57 1.15 1.11 13.58 1938-39 1.7 0.77 0.00 1.31 1.9 1.6 1.37 1.54 77 1.44 91 0.00		June	July	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
1935-36 0.00 0.00 0.00 0.00 0.01 0.56 440 89 41 4.87 97 5.55 0.00 8.56 1937-38 2.00 0.00 0.00 0.00 0.18 4.000 2.83 1.99 2.46 2.23 2.20 0.00 11.57 1937-38 2.00 0.00 0.00 0.00 0.11 2.12 2.16 1.76 3.51 4.57 1.15 1.11 13.58 1938-39 1.17 0.70 0.00 0.13 1.19 16 1.37 1.54 7.77 1.44 91 0.00 6.75 1939-40 1.20 0.00 0.00 0.00 0.00 8.5 0.00 2.65 1.51 3.90 1.82 2.64 0.00 14.37 1941-42 0.00 0.00 0.00 0.00 0.86 5.00 3.23 91 88 5.00 1.19 16 8.32 1942-43 0.00 0.00 0.00 0.00 0.00 3.21 1.03 1.30 2.80 3.99 8.66 2.28 6.90 1943-44 0.00 0.00 0.00 0.00 0.00 3.21 1.03 1.30 2.80 3.99 8.66 2.28 6.90 1944-45 0.00 0.00 0.00 0.01 6.62 1.15 2.61 3.34 1.52 2.57 0.07 41 8.48 1945-46 1.80 0.00 0.00 0.01 6.62 1.15 2.61 3.34 1.52 2.57 0.07 41 8.48 1946-47 0.00 1.10 0.00 0.01 4.79 1.01 6.43 3.49 5.11 6.6 .33 6.64 1947-48 0.10 0.00 0.00 0.00 0.00 0.00 0.00 3.49 5.11 6.6 3.35 6.90 1948-95 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.49 5.1 85 1.85 1.49 0.74 4.93 1949-50 0.00	1934-35	.14	0.00	0.00	0.00	.61	2.60	1.84	2.50	1.72	2.06	2.05	0.00	13.52
1936-37 0.00 0.00 0.00 0.00 1.84 0.00 2.83 1.99 2.46 2.23 3.22 0.00 11.57 1938-39 2.10 0.00 0.00 0.01 11 2.12 1.16 1.76 3.51 4.57 1.15 1.11 13.83 1938-39 0.17 0.07 0.00 0.13 1.9 1.6 1.37 1.54 7.7 1.44 91 0.00 0.30 0.00 0.00 0.00 0.55 0.00 2.23 3.33 2.61 0.99 1.81 0.00 9.32 1940-41 0.00 0.00 0.00 0.00 0.00 0.55 0.00 2.65 1.51 3.90 1.82 2.64 0.00 9.32 1941-42 0.00 0.00 0.00 0.00 0.00 0.04 3.56 5.15 1.30 1.82 2.64 0.00 9.32 1942-43 0.00 0.00 0.00 0.00 0.00 0.04 3.76 6.274 1.14 3.36 8.48 0.00 9.37 1943-44 0.00 0.00 0.00 0.00 0.00 0.33 2.1 1.03 1.30 2.80 3.99 8.66 2.88 6.90 1944-45 0.00 0.11 0.00 0.00 0.01 6.2 1.15 2.61 3.4 1.52 2.57 0.07 4.18 8.48 1946-47 0.00 0.11 0.00 0.00 0.01 6.2 1.15 2.61 3.4 1.52 2.57 0.07 4.18 8.48 1947-48 0.10 0.0														
1938-39													0.00	
1939-40		1 1	0.00		1 1								.11	13.58
1940-41 0.00 0.00 0.00 0.00 0.85 0.00 2.65 1.51 3.90 1.82 2.64 0.00 14.37 1941-42 0.00												91	0.00	6.75
1940-41 0.00 0.00 0.00 0.00 0.86 0.00 2.65 1.51 3.90 1.82 2.64 0.00 14.37 1941-42 0.00 0.00 0.00 0.00 0.00 0.00 3.32 91 88 5.01 1.19 1.16 8.32 1942-43 0.00 0.00 0.00 0.00 0.00 0.34 3.66 2.74 1.14 3.36 .84 0.00 9.37 1943-44 0.00 0.00 0.00 0.00 0.03 .21 1.03 1.30 2.80 .39 .86 .28 6.90 1944-45 0.00 0.00 0.00 0.00 0.02 .23 2.25 1.05 1.27 2.69 1.81 1.16 1.01 8.58 1945-46 1.8 0.00 0.00 0.00 0.01 .62 1.15 2.61 3.4 1.52 2.57 .07 .41 8.48 1946-47 0.00 0.11 0.00 0.00 0.47 .29 .51 0.00 .43 1.49 1.55 .55 5.31 1948-49 0.53 0.00 0.00 0.00 0.00 0.00 0.00 .60 .66 1.48 1.13 1.10 .40 5.39 1949-50 0.00 0.00 0.00 0.00 0.00 0.00 .60 .66 1.48 1.13 1.10 .40 5.39 1950-51 0.07 0.00 0.00 0.00 0.00 0.00 0.00 .60 .66 1.48 1.13 1.10 .40 5.39 1952-53 0.02 0.00 0.	1939-40	.12	0.00	0.00	.04	.57	.06	.22	3.53	2.61	.99	.18	0.00	9.32
1942-43 0.00 0.00 0.00 0.00 0.00 0.31 3.86 2.74 1.14 3.36 8.84 0.00 9.37 1944-45 0.00 0.00 0.00 0.00 0.01 0.21 1.03 1.30 2.80 0.39 86 0.28 6.90 1945-46 1.8 0.00 0.00 0.00 0.01 0.62 1.15 2.61 0.34 1.52 2.57 0.7	1940-41	0.00	0.00	0.00	0.00		0.00	2.65		3.90	1.82		0.00	14.37
1943-44 0.00 0.00 0.00 0.00 0.00 0.21 1.03 1.30 2.80 3.9 86 2.8 6.90 1.944-45 1.8 0.00 0.00 0.01 0.62 1.15 2.61 1.34 1.52 2.57 0.07 1.41 8.48 1.946-47 0.00 0.11 0.00 0.00 1.49 1.10 1.64 3.3 4.9 5.51 6.66 3.3 6.66 1.947-48 0.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.3 0.1 0.99 5.51 1.65 0.55 5.53 1.94 0.07 4.93 1.949-50 0.00	1941-42	0.00	0.00	0.00	0.00	.86	•50	3.32	.91	.88	•50	1.19	.16	8.32
1944-45 0.00 0.00 0.00 0.01 0.62 1.15 2.61 0.34 1.52 2.57 0.07 4.11 8.48 1946-47 0.00 1.11 0.00 0.00 1.49 1.10 1.64 1.33 1.49 1.56 0.33 6.66 1947-48 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.03 0.01 0.99 0.51 8.58 1.94 0.75 0.77 4.93 1949-50 0.00 0.	1942-43	0.00	0.00	0.00	0.00	0.00	.43	.86	2.74	1.14	3.36	.84	0.00	9.37
1945-46	1943-44	0.00	0.00	0.00	0.00	.03	.21	1.03	1.30	2.80	.39	.86	.28	6.90
1946-47	1944-45	0.00	0.00	0.00	.02	.23	2.25	1.05	.27		1.81	.16	.10	
1947-48	1945-46	.18	0.00	0.00	.01	.62	1.15	2.61	.34	1.52	2.57	.07		
1948-49 .55 0.00	1946-47	0.00	.11	0.00	0.00	1.49	1.10	1.64	•33	.49	.51	•66		
1949-50	1947-48				0.00									
1950-51														
1951-52														
1952-53									1					
1953-54 0.08 0.00 0.00 0.00 0.00 0.00 0.00 0.66 2.61 3.25 1.31 .43 .69 90 8.85 1955-56 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.51 1.33 1.22 0.05 8.88 .61 5.60 1957-58 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.15 1.39 1.22 0.05 8.88 .61 5.60 1957-58 0.00 0										1				
1954-55									1					
1955-56										1		1		
1956-57								1	1					
1957-58		1						1			1			
1958-59														
1959-60			1		1		1	ı	1		ı			
1960-61							1				1		1	
1961-62 0.00 0.00 0.00 0.00 0.00 1.11 1.28 7.71 4.88 1.06 0.00 .11 9.15 1.962-63 0.00 0.00 0.00 0.01 1.10 0.00 1.19 1.68 1.37 2.88 5.66 7.97 1.963-64 1.77 0.00 0.00 0.33 7.55 1.23 3.31 6.61 0.02 94 6.44 2.00 5.20 1.964-65 0.00 0.00 0.05 0.07 0.05 1.31 1.44 1.18 3.3 3.33 1.57 0.00 7.45 1.965-66 0.00 0.00 0.05 0.07 0.05 2.15 1.97 6.3 7.71 1.00 0.00 0.07 5.80 1.966-67 0.66 0.44 0.00 2.99 0.99 1.28 2.57 1.41 0.05 2.42 2.95 0.07 11.23 1.967-68 2.23 0.00 0.00 0.31 0.00 1.99 0.05 6.62 6.64 1.00 5.00 0.88 5.87 1.968-69 0.00 0.00 0.00 0.00 0.00 1.33 0.98 1.64 6.69 4.54 7.9 8.5 3.2 17.14 1.969-70 2.21 0.07 0.00 0.00 0.00 0.00 2.40 1.23 3.5 1.9 2.23 4.01 1.44 6.24 1.971-72 0.00 0.00 0.00 0.00 0.00 2.40 1.23 3.5 1.9 2.23 4.01 1.44 6.24 1.971-72 0.00 0.00 0.00 0.00 0.00 0.00 2.40 1.23 3.5 1.9 2.23 4.01 1.44 6.24 1.971-73 0.00 0.			1				ı		1			1		
1962-63		1	i .	1										
1963-64		1		l .		1	1						1	
1964-65							1							
1965-66					1					1				
1966-67		I .										1	.07	5.80
1968-69	1966-67	.06	.04	0.00		.09	1.28	2.57	1.41	.05	2.42	2.95	.07	11.23
1969-70	1967-68	.23												1
1970-71	1968-69	0.00	0.00	0.00	0.00									1
1971-72	1969-70													
1972-73 0.00 0.00 0.00 2.04 .21 2.90 .65 2.44 2.29 2.20 .12 0.00 11.05 1973-74 0.00 0.00 0.00 0.00 0.00 .76 .46 .94 2.97 .13 1.75 .03 0.00 7.04 1974-75 0.00 0.00 0.00 0.00 0.65 .24 1.40 .09 2.26 1.24 .49 0.00 6.37 1975-76 0.00 0.00 0.00 .98 .76 .06 .22 0.00 2.94 .19 1.47 .03 6.64 1976-77 0.10 0.00 .22 1.47 0.00 1.15 .96 .96 .03 .43 0.00 .01 5.24 1977-78 0.7 0.00 0.00 0.00 0.05 .06 2.85 2.22 5.05 4.12 1.71 0.00 16.13 1978-79 0.00 0.00 0.00 0.00 0.00 .79 .50 1.84 1.61 1.16 .03 8.00 7.03 1979-80 0.00 0.04 0.00 0.08 .41 .62 .41 9.90 2.71 1.28 .05 .04 8.54 1980-81 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.21 1.80 .86 2.10 .68 .17 5.91 1981-82 0.00 0.00 0.00 0.00 0.00 .76 1.08 .29 .84 .33 3.52 1.75 0.00 8.62 1982-83 .45 0.00 0.5 .82 .43 1.66 1.22 .01 .42 .27 .18 0.00 5.06 1984-85 0.00 0.05 0.00 0.00 0.54 2.11 .56														
1973-74 0.00 0.00 0.00 0.00 0.00 0.65 .46 .94 2.97 .13 1.75 .03 0.00 7.04 1974-75 0.00 0.00 0.00 0.00 .65 .24 1.40 .09 2.26 1.24 .49 0.00 6.37 1975-76 0.00 0.00 0.00 .98 .76 .06 .22 0.00 2.94 .19 1.47 .03 6.64 1976-77 .01 0.00 .22 1.47 0.00 1.15 .96 .96 .03 .43 0.00 .01 5.24 1977-78 .07 0.00 0.00 0.00 0.05 .06 2.85 2.22 5.05 4.12 1.71 0.00 16.13 1978-79 0.00 0.00 0.00 0.00 .79 .50 1.84 1.61 1.16 .03 8.00 7.03 1979-80 0.00 0.04 0.00 0.08 .41 .62 .41 9.90 2.71 1.28 .05 .04 8.54 1980-81 0.00 0.00 0.00 0.00 0.00 .99 0.00 .21 1.80 .86 2.10 .68 .17 5.91 1981-82 0.00 0.00 0.00 0.00 0.00 .76 1.08 .29 .84 .33 3.52 1.75 0.00 8.62 1982-83 .45 .18 0.00 .64 1.03 2.15 .71 .74 2.59 3.39 1.63 .04 16.55 1983-84 .45 0.00 0.05 .82 .43 1.66 1.22 .01 .42 .27 .18 0.00 5.06 1984-85 0.00 0.05 0.00 0.00 .54 2.11 .56														
1974-75														
1975-76			1		1	1						1	1	l .
1976-77 .01 0.00 .22 1.47 0.00 1.15 .96 .96 .03 .43 0.00 .01 5.24 1977-78 .07 0.00 0.00 0.00 .05 .06 2.85 2.22 5.05 4.12 1.71 0.00 16.13 1978-79 0.00 0.00 0.00 0.00 0.00 .79 .50 1.84 1.61 1.16 .03 8.00 7.03 1979-80 0.00 0.04 0.00 0.08 .41 .62 .41 9.90 2.71 1.28 .05 .04 8.54 1980-81 0.00 0.00 0.00 0.00 0.00 0.00 .21 1.80 .86 2.10 .68 .17 5.91 1981-82 0.00 0.00 0.00 0.00 .76 1.08 .29 .84 .33 3.52 1.75 0.00 8.62 1982-83 .45 .18 0.00 .64 1.03 2.15 .71 .74 2.59 3.39 1.63 .04 16.55 1983-84 .45 0.00 0.05 .82 .43 1.66 1.22 .01 .42 .27 .18 0.00 5.06 1984-85 0.00 0.05 0.00 0.00 .54 2.11 .56														
1977-78														
1978-79														
1979-80														
1980-81 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.21 1.80 .86 2.10 .68 .17 5.91 1981-82 0.00 0.00 0.00 0.00 .76 1.08 .29 .84 .33 3.52 1.75 0.00 8.62 1982-83 .45 .18 0.00 .64 1.03 2.15 .71 .74 2.59 3.39 1.63 .04 16.55 1983-84 .45 0.00 .05 .82 .43 1.66 1.22 .01 .42 .27 .18 0.00 5.06 1984-85 0.00 0.00 0.00 0.01 .52 1.41 1.66 .59 .61 .68 .12 .01 5.61 1985-86 0.00 0.05 0.00 0.00 .54 2.11 .56														
1981-82 0.00		1	1											
1982-83														1
1983-84 .45 0.00 .05 .82 .43 1.66 1.22 .01 .42 .27 .18 0.00 5.06 1984-85 0.00 0.00 0.00 0.01 .52 1.41 1.66 .59 .61 .68 .12 .01 5.61 1985-86 0.00 0.05 0.00 0.00 .54 2.11 .56														
1984-85 0.00 0.00 0.00 0.01 .52 1.41 1.66 .59 .61 .68 .12 .01 5.61 1985-86 0.00 0.05 0.00 0.00 .54 2.11 .56														
1985-86 0.00 0.05 0.00 0.00 .54 2.11 .56														
51 Year Total Rainfall 416.81														
Average Rainfall 8.17	2500-00	1000	1 3 8 0 3	1	1 3 3 3 3	1	1	1 530		ear T	otal	Rainf	all	416.81
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	AGchrtl	•		•	•	•		•	•		•		-	-