# 2003 Agricultural Report SAN JOAQUIN COUNTY



### **Grain Corn in San Joaquin County**

Our featured commodity for this year's Agricultural Report is corn for grain. There are many types of corn but grain corn is the most commonly produced with over 75 million acres grown in the United States each year. Unlike sweet corn that is listed as a vegetable crop and often eaten fresh straight from the cob, grain corn is listed as a field crop and is nearly always processed. Most of the grain corn produced is used in livestock feed. Nationwide, over 57% of the corn crop is fed to livestock with cattle, hogs, and poultry being the largest consumers. The balance is processed into ingredients for many food items and industrial purposes

San Joaquin County is California's number one county in grain corn production with a value of \$20,619,000 in the year 2003. The weather and rainfall of San Joaquin County is made for growing corn. This is due to our early spring, long growing season, and early marketability.

Corn is the second most plentiful grain in the world behind rice and ahead of wheat. Scientists believe that corn was first grown on the highlands of Guatemala at least 7,000 years ago. It was started from a wild grass called teosinte with small kernels placed far apart on the ear. As the hunter/gatherer tribes transformed into sedentary agricultural societies, the practice of maize agriculture took hold and corn gradually evolved into the form we know today. The Native Americans thought of corn as a gift of the gods and they referred to corn, squash, and beans as the "Three Sisters". These three commodities formed the nucleus of their diet.

Corn is one of the most versatile commodities grown. It forms the base for the tortillas and tamales of Mexico, the polenta of Italy, the ugali of Kenya, and the cornbread of America. Corn and corn products are an integral part of our everyday life. The chickens that laid the eggs you had for breakfast were fed corn and many of the soft drinks you enjoy are sweetened with corn syrup. The textbooks you study from are bound with cornstarch and the ink used to print them contains corn oil. Ethanol, a product of corn, added to gasoline oxygenates fuels in areas with unhealthy levels of carbon monoxide. In the U.S. each year, approximately 2 billion gallons of ethanol are added to gasoline to increase octane and improve the emissions quality of gasoline. The sugars derived from the corn grown in San Joaquin County provide local canneries, wineries, and businesses with fructose. Finally, the County's cornfields provide important habitat and nutrition for migrating waterfowl.

Corn is an ancient crop, closely tied to the development of agriculture in the new world. As corn farming spread, it influenced cultures and economies everywhere. Because of its many uses, corn has a bright future. We are proud that San Joaquin County is the apex of corn growing in the state. This year we are also proud to celebrate corn's many contributions to our health and lifestyle.

### SAN JOAQUIN COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

### **2003 ANNUAL CROP REPORT**

### Scott Hudson Agricultural Commissioner

Compiled by Don McCoon, Jr. and Colleen Bednarek

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Senior Office Assistant, Lodi
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A.G. KAWAMURA, SECRETARY
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
AND
THE HONORABLE BOARD OF SUPERVISORS
SAN JOAQUIN COUNTY

Dear Secretary and Board Members:

In accordance with Section 2279 of the California Food and Agriculture Code, I am pleased to present the seventieth Annual Report of Agricultural Production in San Joaquin County. The values shown are estimates based on the most common method of sale for the individual commodity, except for fresh fruits and vegetables where the value is based on the F.O.B. packed price at the shipping point. The figures contained in this report are gross values rather than net returns to the grower.

The gross value of agricultural production for 2003 in San Joaquin County is estimated to be an all time high of \$1,494,693,000. This represents a 10.4% increase from the estimated \$1,353,918,000 for 2002. Significant increases occurred in Fruit & Nut Crops, Livestock & Poultry, Nursery and Livestock & Poultry Products. Apiary, Seed and Vegetable Crops remained relatively static. Field Crops decreased in value. Highlights of the 2003 crop year are as follows:

- Milk remained the county's most valuable agricultural commodity in 2003. Higher prices paid to producers
  offset a drop in production.
- Egg values reached an all time high to place them at number nine on the San Joaquin County TOP TEN list.
- Grapes stayed at number two despite values dropping to the lowest point in 9 years.
- A variety of factors including the popularity of high protein low carbohydrate diets were reflected by high livestock prices and lower values for many cereal grain crops.
- Almond values benefited greatly from the increased prices paid in 2003.
- Nursery products reached an all time high in 2003. Trees for landscaping as well as for new plantings of almond and walnut orchards helped to spur the local industry.
- White Stripe Rust, a fungal disease, severely affected wheat yields in 2003.

I wish to express my sincere appreciation to all who assisted my biologists and deputies by furnishing the necessary information that made this report possible.

Respectfully submitted,

Scott Hudson

Agricultural Commissioner

### FIELD CROPS

Lower yields and decreased plantings led to a drop in values for many crops.

				PRO	DUCTIO	N		GROSS VALUE	
CROP		YEAR	ACRES HARVESTED	YIELD	TOTAL	UNIT	VALUE	SUBTOTAL	TOTAL
BEANS, DRY, AL	L	2003	9,400	1.09	10,200	TON	\$640.00		\$6,526,000
		2002	10,600	1.08	11,400	TON	\$693.00		\$7,895,000
BL/	CKEYE	2003	1,600	1.00	1,600	TON	\$570.00	\$930,000	
		2002	1,000	0.80	800	TON	\$640.00	\$512,000	
KID	NEY	2003	2,200	1.05	2,300	TON	\$616.20	\$1,421,000	
		2002	3,400	0.98	3,400	TON	\$640.00	\$2,159,000	
LIM	IA	2003	4,400	1.22	5,400	TON	\$681.00	\$3,663,000	
		2002	5,000	1.43	7,200	TON	\$650.00	\$4,648,000	
GARBANZ	O/OTHER	2003	1,200	0.73	876	TON	\$585.00	\$512,000	
		2002	1,200	1.00	1,200	TON	\$480.00	\$576,000	
CORN, GRAIN		2003	46,700	4.62	216,000	TON	\$95.00		\$20,619,000
		2002	47,600	5.20	247,600	TON	\$102.00		\$25,254,000
HAY, ALL		2003	80,100	6.60	528,400	TON	\$96.00		\$50,467,000
		2002	87,600	6.44	563,800	TON	\$113.00		\$63,644,000
ALF	ALFA	2003	63,476	7.11	451,314	TON	\$100.00	\$45,303,000	
		2002	67,810	7.00	474,670	TON	\$120.00	\$56,960,000	
оті	IER	2003	16,636	4.63	77,100	TON	\$67.00	\$5,164,000	
		2002	19,805	4.50	89,100	TON	\$75.00	\$6,684,000	
PASTURE & RAN	GE	2003	135,000			ACRE	\$37.39		\$5,055,000
		2002	139,000			ACRE	\$31.00		\$4,402,000
IRR	IGATED	2003	15,200			ACRE	\$135.00	\$2,055,000	
		2002	19,300			ACRE	\$135.00	\$2,602,000	
OTH	IER	2003	120,000			ACRE	\$25.00	\$3,000,000	
		2002	120,000			ACRE	\$15.00	\$1,800,000	
RICE		2003	6,350	4.05	25,700	TON	S216.06		\$5,552,000
		2002	6,900	4.20	29,000	TON	\$165.00		\$4,782,000
SAFFLOWER		2003	10,700	1.12	12,000	TON	\$286.00		\$3,432,000
		2002	8,200	1.50	12,200	TON	\$246.00		\$3,010,000
SILAGE, CORN		2003	40,100	28.35	1,136,800	TON	\$20.00		\$22,828,000
		2002	39,700	30.00	1,191,700	TON	\$22.00		\$26,217,000
SILAGE, OTHER		2003	42,300	12.96	547,700	TON	\$18,37		\$10,062,000
INCLUDES GREE	N CHOP	2002	41,800	14.00	585,600	TON	\$16.00		\$9,369,000

### FIELD CROPS

Lower yields and decreased plantings led to a drop in values for many crops.

ACRES HARVESTED

45,000

30,700

4,820 2,170

YEAR

2003

2002

2003

2002

PRO	DUCTION	1		GROSS VALUE			
YIELD	TOTAL	UNIT	VALUE	SUBTOTAL	TOTAL		
1.85	83,300	TON	\$112.00		\$9,351,000		
2.68	82,200	TON	\$106.00		\$8,717,000		
					\$1,695,000		
					5824,000		

TOTAL	2003	420,700	\$135,587,000
	2002	413,000	\$154,114,000

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

CROP

WHEAT

OTHER\*

### SEED CROPS

Many seed crops showed increased yields.

				GROSS VALUE				
CROP	YEAR	ACRES HARVESTED	YIELD	TOTAL	UNIT	VALUE	SUBTOTAL	TOTAL
KIDNEY BEAN*	2003	946	21.00	19,866	CWT	\$35.00		\$695,000
	2002	1,490	19.20	28,600	CWT	\$36.00		\$1,030,000
BEANS, OTHER*	2003	550	19.00	10,450	CWT	\$37.00		\$389,000
	2002	553	13.75	7,604	CWT	\$36.00		\$417,000
POTATOES, SEED	2003	865	418.00	281,125	CWT	\$12.50		\$3,514,000
	2002	771	350.00	269,900	CWT	\$15.00		\$4,048,000
VEGETABLE SEED	2003	428						\$3,376,000
	2002	655						\$2,211,000
MISCELLANEOUS,	2003	510						\$473,000
SUDAN, GRAIN & ETC.*	2002	620						\$255,000
TOTAL	2003	3,300				STEEL ST		\$8,447,000
	2002	2,360						\$7,961,000

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

<sup>\*</sup>INCLUDES BARLEY, COTTON, SUNFLOWERS AND OATS FOR GRAIN.

<sup>\*</sup>INCLUDES CERTIFIED SEED

### FRUIT AND NUT CROPS

Tree crops showed increased yields in 2003.

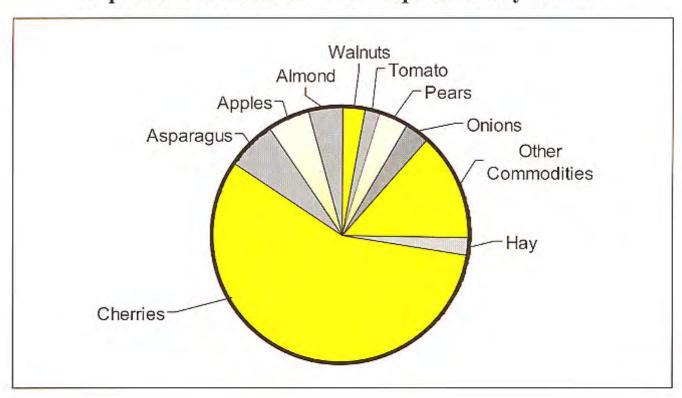
				PRO	DUCTION	GROSS VALUE			
CROP		YEAR	ACRES HARVESTED	YIELD	TOTAL	UNIT	VALUE	SUBTOTAL	TOTAL
ALMOND, N	MEATS	2003	42,800	0.92	39,400	TON	\$3,200.00		\$125,997,000
		2002	43,900	0.93	40,800	TON	\$2,200.00		\$89,940,000
ALMOND, E	TUTES	2003			98,400	TON	\$75.00		\$7,383,000
ALMOND, I	10110	2002			102,100	TON	\$70.00		\$7,146,000
APPLES, AL	.L	2003	5,732	16.23	93,040	TON	\$575.56		\$53,550,000
		2002	5,832	9.25	54,002	TON	\$624.00		\$33,715,000
	FRESH	2003			61,974		5812.00	\$50,297,000	
		2002			38,342		\$847.50	\$32,495,000	
	PROCESSING	2003			31,066		\$104.71	\$3,253,000	
		2002			15,660		\$77.90	\$1,220,000	
APRICOTS		2003	1,364	10.00	13,600	TON	\$284.00		\$3,877,000
Airicord		2002	2,300	8.80	20,200	TON	\$290.00		\$5,870,000
BUSHBERR		2003	140	3.00	460	TON	\$3,159.48		81,453,400
	This year Bush	berries wer	e removed from MISO	CELLANEO	a to form the	ar own grouj	р.		
CHERRIES,	ALL	2003	15,700	2.64	41,400	TON	\$2,654.00		\$109,869,000
		2002	14,500	2.22	32,200	TON	\$2,160.00		\$69,430,000
	FRESH	2003			36,030	TON	\$2,990.00	\$107,739,000	
		2002			26,830	TON	\$2,509.00	\$67,316,000	
	PROCESSING	2003			5,405	TON	\$394.00	\$2,130,000	
		2002			5,366	TON	\$394.00	\$2,114,000	
GRAPES, AI	L	2003	83,200	5.74	477,400	TON	\$366.90		\$175,156,000
		2002	84,100	6.12	515,000	TON	\$414.00		\$213,220,000
	TABLE,	2003	650	4.77	3,100	TON	\$86.00	\$263,880	
	CRUSHED	2002	1,100	6.27	6,900	TON	\$88.00	\$605,000	
	WINE, ALL	2003	82,500	5.75	474,300	TON	\$368,70	\$174,892,000	
		2002	83,000	6.12	508,000	TON	\$418.50	\$212,615,000	
	FRESH	2003			4,600	TON	\$200.00	\$920,000	
		2002			5,120	TON	\$250.00	\$1,280,000	
	CRUSHED	2003			469,700	TON	\$370.40	\$173,972,000	
		2002			502,455	TON	\$420.60	\$211,335,000	

### FRUIT AND NUT CROPS

Tree crops showed increased yields in 2003.

				PRO	DUCTION	V		GROSS VALUE	
CROP		YEAR	ACRES HARVESTED	YIELD	TOTAL	UNIT	VALUE	SUBTOTAL	TOTAL
PEACHES, ALL		2003	2,820	21.06	59,400	TON	\$228.00		\$13,548,000
		2002	2,890	19.31	55,800	TON	\$243.00		\$13,541,000
CLINGS	STONE	2003	2,060	20.20	41,600	TON	\$236.00	\$9,818,000	
		2002	2,030	20.70	43,500	TON	\$235.00	\$10,223,000	
FREEST	TONE	2003	758	23.50	17,810	TON	\$209.43	\$3,730,000	
		2002	788	15.60	12,290	TON	\$270.00	\$3,318,000	
PEARS		2003	549	18.00	9,880	TON	\$215.00		\$2,125,000
		2002	549	19.00	10,430	TON	\$250.00		\$2,608,000
WALNUTS, ENGLISH	1	2003	45,000	1.93	86,850	TON	\$1,110.00		\$96,386,000
		2002	45,000	1.50	67,500	TON	\$1,120.00		\$75,600,000
MISCELLANEOUS		2003	897						\$4,198,000
		2002	1,168						\$6,352,000
TOTAL	_	2003	198,000				TOTAL TELEVISION		\$593,542,000
		2002	200,000				The Control of the Co	- MARIE .	\$517,295,000

## Agricultural Export Shipments Certified in San Joaquin County in 2003



### **VEGETABLE CROPS**

Tomatoes are the leading vegetable crop again in 2003.

			PRO	DUCTION	1		GROSS	GROSS VALUE	
CROP	YEAR	ACRES HARVESTED	YIELD	TOTAL	UNIT	VALUE	SUBTOTAL	TOTAL	
ASPARAGUS	2003	19,300	1.38	26,600	TON	\$1,600.00		\$42,614,000	
ASTARAGUS	2002	19,000	1.27	24,100	TON	\$1,500.00		\$36,195,000	
CORN, SWEET	2003	3,210	8.29	26,600	TON	\$229.00		\$6,096,000	
	2002	3,370	7.60	25,600	TON	\$270,00		\$6,917,000	
CUCUMBERS	2003	2,380	8.29	19,700	TON	\$400.00		\$7,895,000	
	2002	2,050	9.33	19,100	TON	\$300.00		\$5,727,000	
MELONS, ALL	2003	3,140	18.10	56,900	TON	\$264.00		\$15,012,000	
	2002	3,550	21.00	74,500	TON	\$227.00		\$16,889,000	
WATERMELON	2003	1,280	28.00	35,900	TON	\$280.00	\$10,051,000		
	2002	1,470	35.00	51,600	TON	\$180.00	\$9,280,000		
OTHER	2003	1,860	11.31	21,000	TON	\$236.00	\$4,961,000		
	2002	2,080	11.04	22,900	TON	\$332.00	\$7,609,000		
ONIONS, DRY	2003	1,820	33.00	59,100	TON	\$250.00		\$14,762,000	
	2002	2,700	26.00	70,200	TON	\$240.00		\$16,848,000	
PEPPERS	2003	1,050	15.00	15,800	TON	\$576.00		\$9,072,000	
	2002	1,900	15.31	29,100	TON	\$572.00		\$16,639,000	
POTATOES	2003	4,030	20.91	84,300	TON	\$185.00		\$15,633,000	
	2002	3,150	19.70	62,000	TON	S221.00		\$13,697,000	
PUMPKINS	2003	3,470	14.00	48,500	TON	\$150.00		\$7,279,000	
	2002	3,450	15.00	51,800	TON	\$160.00		\$8,290,000	
TOMATOES, ALL	2003	42,080	30.07	1,265,300	TON	\$90.00		\$118,380,000	
	2002	43,600	29.97	1,306,900	TON	\$80.00		\$105,802,000	
SHIPPING	2003	10,580	10.97	116,100	TON	\$525.00	\$60,920,000		
	2002	11,000	9.15	100,700	TON	\$440.00	\$44,286,000		
PROCESSING	2003	31,500	36.50	1,149,200	TON	\$50.00	\$57,460,000		
	2002	32,600	37.00	1,206,200	TON	\$51.00	\$61,516,000		
MISCELLANEOUS	2003	5,610						\$22,227,000	
VEGETABLES	2002	5,490						\$19,980,000	
TOTAL	2003	86,100						\$258,970,000	
	2002	88,300						\$246,984,000	

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

### NURSERY PRODUCTS

Woody Ornamentals are the highlight of the Nursery industry in 2003.

		The contract of		GROSS VALUE
		QUANTITY SOLD BY		
ITEM	YEAR	PRODUCERS	UNIT	TOTAL
GRAPEVINES, STRAWBERRY PLANTS,	2003	129,315,000	PLANT	\$9,811,000
FRUIT & NUT TREES	2002	106,221,000	PLANT	\$5,488,000
VEGETABLE PLANTS	2003	283,714,000	PLANT	\$7,568,000
	2002	132,282,000	PLANT	\$6,544,000
FLOWERING POTTED PLANTS	2003	2,128,000	EACH	\$7,616,000
	2002	2,346,000	EACH	\$9,519,000
FOLIAGE PLANTS	2003	4,317,000	EACH	\$13,469,000
	2002	3,893,000	EACH	\$10,737,000
BEDDING PLANTS	2003	1,566,000	PKG	\$5,174,000
	2002	1,199,000	PKG	\$4,452,000
WOODY ORNAMENTALS	2003	7,371,000	EACH	\$59,585,000
	2002	9,217,000	EACH	\$53,517,000
BULBS, RHIZOMES, TURF,	2003			\$26,794,000
CACTUS, CHRISTMAS TREES, ETC.	2002			\$28,815,000
TOTAL	2003			\$130,017,000
	2002			\$119,072,000

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

### APIARY PRODUCTS

Increases in bearing tree crop acreages benefitted beekeepers in 2003.

ITEM	YEAR	PRODUCTION	UNIT	PER UNIT	TOTAL
HONEY	2003	181,000	LBS	\$1.30	\$235,300
	*revised 2002	175,100	LBS	\$1.25	\$218,900
BEESWAX	2003	3,022	LBS	\$1.00	\$3,000
	2002	1,953	LBS	\$1.32	\$2,600
POLLINATION	2003	192,300	HIVE	\$45.00	\$8,653,500
	2002	186,250	HIVE	\$45.00	\$8,381,300
TOTAL	2003				\$8,892,000
	2002				\$8,603,000

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

### LIVESTOCK AND POULTRY

High protien diets and limited Canadian imports led to increased prices in 2003.

					PER	
ITEM	YEAR	NO, HEAD	LIVEWEIGHT	UNIT	UNIT	TOTAL
CATTLE & CALVES	2003	64,300	549,000	CWT	\$57.51	\$31,583,000
	2002	65,100	546,000	CWT	\$45.52	\$24,869,000
SHEEP & LAMBS	2003	14,000	18,000	CWT	\$94.00	\$1,711,000
	2002	14,000	16,000	CWT	\$68.00	\$1,109,000
BROILERS	2003	2,667,150	10,669,000	LBS	\$0.38	\$4,054,000
	2002	2,757,900	9,653,000	LBS	\$0.32	\$3,089,000
OTHER CHICKENS	2003	1,629,700		EACH	\$0.02	\$33,000
& SPENT HENS	2002	1,092,115		EACH	\$0.02	\$22,000
TURKEYS	2003	587,800	14,107,000	LBS	\$0.35	\$4,990,000
	2002	368,000	5,886,000	LBS	\$0.36	\$2,119,000
OTHER LIVESTOCK*	2003					\$6,679,000
	2002					\$6,072,000
TOTAL	2003					\$49,050,000
	2002					\$37,280,000

<sup>\*</sup>Other livestock includes hogs, squab, ducks and other fowL

### LIVESTOCK AND POULTRY PRODUCTS

Increased milk prices offset lower production.

					The state of the s	
				PER		
ITEM	YEAR	PRODUCTION	UNIT	UNIT	SUBTOTAL	TOTAL
MILK, ALL	2003	21,458,000	CWT	\$12.00		\$256,633,000
	2002	21,480,000	CWT	\$11.05		\$237,387,000
MARKET	2003	21,398,000	CWT	\$12.00	\$255,918,000	
	2002	21,416,000	CWT	\$11.05	\$236,717,000	
MANUFACTURING	2003	60,000	CWT	\$11.90	\$715,000	
	2002	63,000	CWT	\$10.60	\$670,000	
WOOL	2003	119,000	LBS	\$0.75		\$89,000
	2002	79,000	LBS	\$0.45		\$36,000
EGGS, CHICKEN	2003	65,186,100	DOZ	50.79		\$51,558,000
	*2002	58,246,100	DOZ	\$0.40		\$23,298,000
MANURE	2003	382,000	TON	\$5.00		\$1,908,000
	2002	378,000	TON	\$5.00		\$1,888,000
TOTAL.	2003					S310,188,000
	2002					\$262,609,000

### CORN FACTS AND TRIVIA



The average ear of corn has 800 kernels arranged in 16 rows. A bushel (56 pounds) of corn contains approximately 73,000 kernels.

A Bushel of corn can produce sweetener for 325 cans of soda, oil for two pounds of margarine and starch for one ton of paper. One bushel of corn fed to livestock produces 5.6 pounds of retail beef, 13 pounds of retail pork, 19.6 pounds of chicken or 28 pounds of catfish.

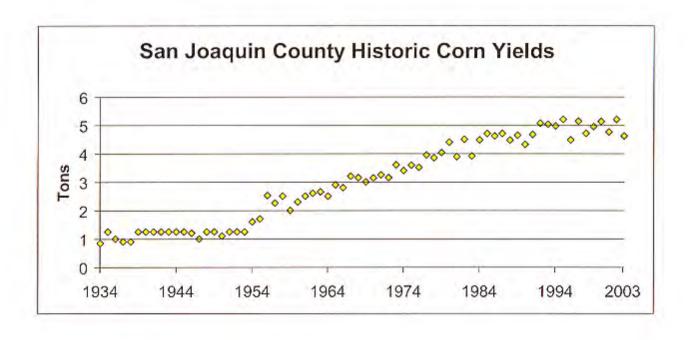
Corn is an ingredient in over 3,000 grocery products.

Corn grows in a series of segments, like other members of the grass family.

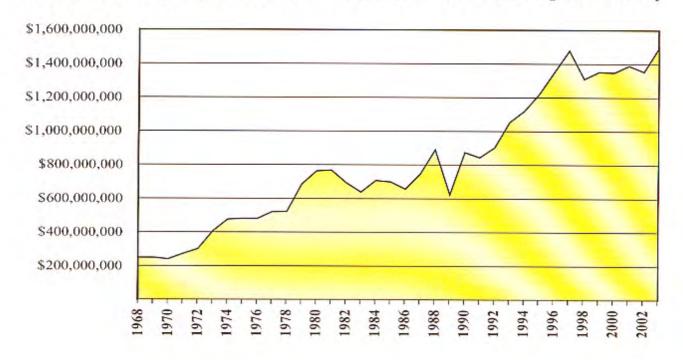
Archaeologists have been able to pop 1,000-year-old popcorn.

Corn is grown on every continent except Antarctica. The US provides about 80% of the worlds corn needs and is the largest exporter. Corn exports help our trade balance.

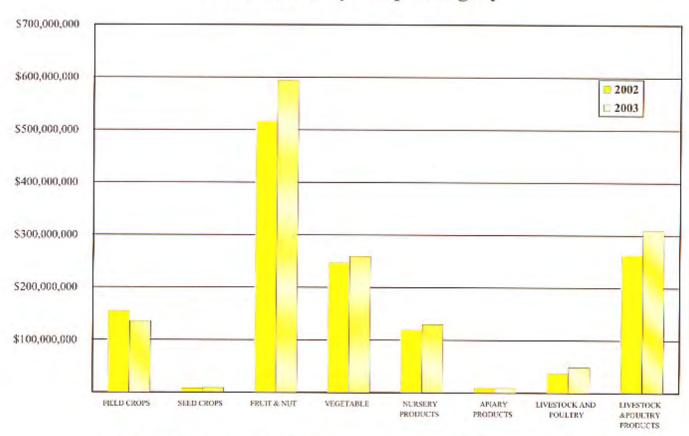
Americans eat only a little whole kernel corn but eat 120 million bushels in processed foods.



### Yearly Values of Agricultural Commodities in San Joaquin County



### **Gross Values by Crop Category**

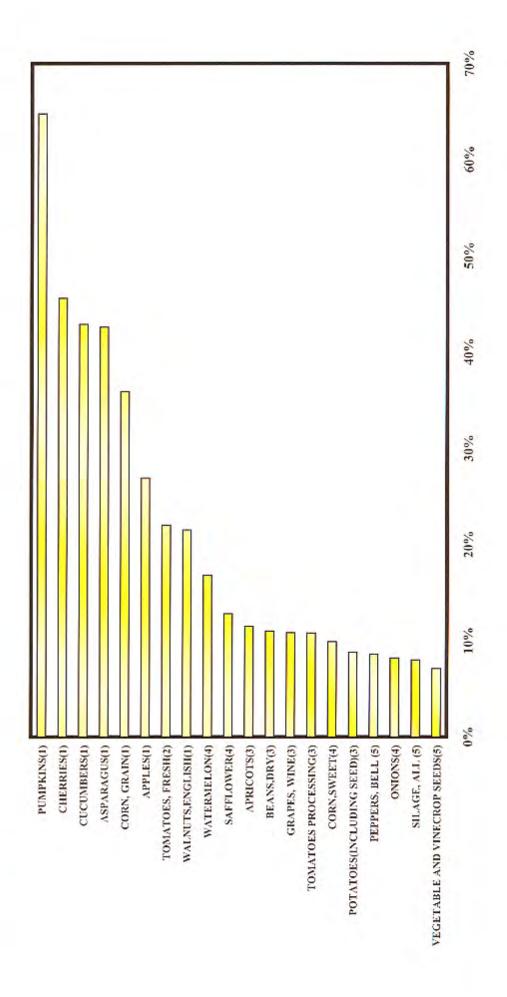


TOTAL VALUE 2002: \$1,353,918,000

TOTAL VALUE 2003: \$1,494,693,000

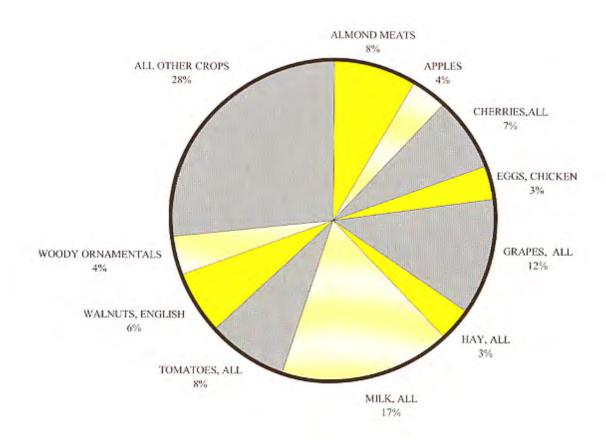
# SAN JOAQUIN COUNTY'S SHARE OF STATEWIDE PRODUCTION

value during the 2002 crop year. The bars represent San Joaquin County's percentage of the state value for that crop. The numbers in parentheses next to the crop labels show San Joaquin County's ranking for that Listed below are the crops in which San Joaquin County ranked in the top 5 in the State based on gross



### SAN JOAQUIN COUNTY'S TOP TEN LEADING CROPS

MILK, ALL	256,633,000
GRAPES, ALL	175,156,000
ALMOND MEATS	125,997,000
TOMATOES, ALL	118,380,000
CHERRIES,ALL	109,869,000
WALNUTS, ENGLISH	96,386,000
WOODY ORNAMENTALS	59,585,000
APPLES	53,550,000
EGGS, CHICKEN	51,558,000
HAY, ALL	50,467,000
ALL OTHER CROPS	397,868,400



### Sustainable Agriculture

### **Insect Trapping Program**

To protect our agricultural resources from non-native insects, San Joaquin County maintains a Detection Trapping Program. In 2003, San Joaquin County deployed over 6,500 traps. The majority of these traps were targeted for the Glassy Winged Sharpshooter. Additionally, over 1,400 traps were utilized for the detection of various fruit flies. These included traps for Mediterranean Fruit Fly and Oriental Fruit Fly among others. The Red Imported Fire Ant (RIFA) program had over 19,000 bait stations placed in various apiaries, nurseries, fairgrounds and in newly landscaped areas. Interstate sealed shipments from high risk areas were also profiled for RIFA. A few of the other pests that county biologists watch for are Gypsy Moth, Japanese Beetle, Khapra Beetle and European Corn Borer

### **Biological Control**

<u>Weeds</u> –17 different insects were enlisted to aid in the battle against 9 different weed pests. **Yellow Starthistle** is one of the Countyis most invasive weeds, and there are 4 different insects working to control it. Other weeds currently targeted for biocontrol are **Puncturevine**, **Water Hyacinth** and various **Thistle** species.

Insect pests – San Joaquin County Biologists monitored the following: Ladybird Beetle, Clitostethus arcuatus, and its cousin the Asiatic Ladybird Beetle, Harmonia Axyridis are well known for the insatiable appetite for aphid and scale insects. Other predators employed in the fight are the Vedalia Beetle Rodolia cardinalis, and Parasitic fly, Cryptochaetum iceryae, which target the Cottony Cushion Scale. Two EncarsiaWasps, Encarsia formosa and Encarsia partenopea feed on the Greenhouse whitefly and Ash whitefly. Two species of Predator Mites, Galendromus and Phytoseiulus spp., attack Twospotted mites, Encyrtid Wasp parasitizes red gum lerp psyllid, while a Nematode Steinernema feltiae, acts on fungus gnat larvae.

<u>Vertebrate pests</u> – **Owls** are predators of many nocturnal vertebrate pests, especially **gophers, voles** and **mice**. The easiest way to introduce owls to an area is to provide habitat for them. Owl boxes have proven to be the best way to do this. Plans to build these owl boxes are distributed for free by the **Lodi-Woodbridge Winegrape** commission. Plans are also available at any **San Joaquin County Agricultural office**. It is estimated that around 1,000 Owl boxes have been built and deployed by property owners around the county.

### **Quarantine Interceptions**

In an effort to stop smuggled or hitchhiking pests from entering our county, the Agricultural Commissioneris office conducts inspections at the USPS Regional Distribution Center, UPS, FedEx and express mail carriers in San Joaquin County. In 2003 San Joaquin County biologists intercepted 181 "Q" and "A" rated pests through quarantine inspections. The most commonly rejected pests were Lesser Snow Scale and various life stages of Leafhoppers. Other significant pests intercepted include Magnolia White Scale, Red Imported Fire Ant and Red Wax, Rufous, Coconut and Cockerell scales.

### **Punagrass Eradication Project**

**Punagrass**, *Acnatherum brachychaetum*, is a tough, unpalatable weed of pastures and hay crops. Localized infestations of this noxious weed occur in the Tracy/Banta area. This native of South America forms large tough clumps that outcompete our native plants. Manual removal of mature plants has proven to be the most effective method of control. In 2003 over 5,000 plants were dug up by hand. Since 1996, a total of 75,885 plants have been removed from 21 different alfalfa fields. Eradication has been achieved in seven of these fields.

### San Joaquin County Trading Partners 2003

GERMANY PERU ALGERIA **PHILIPPINES ARGENTINA** GHANA POLAND GREECE ARMENIA PORTUGAL **GUATEMALA** AUSTRALIA REPUBLIC OF KOREA AUSTRIA HONDURAS SOUTH AFRICA BAHRAIN HONG KONG INDIA RUSSIAN FEDERATION BELGIUM INDONESIA SAUDI ARABIA BRAZIL SINGAPORE BULGARIA ISRAEL SPAIN CAMEROON ITALY CANADA JAMAICA SWEDEN CANARY ISLANDS JAPAN SWITZERLAND JORDAN TAIWAN CHILE THAILAND KUWAIT COLOMBIA COSTA RICA LATVIA TONGA TRINIDAD AND TOBAGO LEBANON CYPRUS LITHUANIA TUNISIA CZECH REPUBLIC TURKEY MALAWI DENMARK UGANDA DOMINICAN REPUBLIC MALTA MARSHALL ISLANDS UKRAINE ECUADOR. UNITED ARAB EMIRATES MEXICO **EGYPT** EL SALVADOR MONGOLIA UNITED KINGDOM URUGUAY **NETHERLANDS ESTONIA** VENEZUELA **NEW ZEALAND** FIJI VIETNAM FRANCE NORWAY FRENCH POLYNESIA PANAMA

### Select San Joaquin

Select San Joaquin is a program designed to help consumers identify those products produced here in our great county. The logo for this new program appears on the back cover of this years crop report.

Select San Joaquin simply means selecting locally grown produce whenever possible. Buying local means helping to support the thousands of farmers and agricultural workers in San Joaquin County. It means you support your local growers and appreciate their effort to provide locally grown, select fresh produce.

As the seventh largest agricultural county in the state, San Joaquin County is a worldwide leader in agricultural production. Consequently agriculture contributes mightily to our local economy. Each dollar of agricultural production returns to our local economy to fuel many other support industries such as food processors, trucking, services and suppliers.

In fact, when you figure in the number of local businesses that depend on agriculture, our \$1.49 billion dollar agricultural industry actually contributes over \$7 billion dollars to our local economy. So, when you select San Joaquin you are contributing to the health and growth of our local jobs, businesses, and overall economy.

### GENERAL SAN JOAQUIN COUNTY INFORMATION

COUNTY SEAT STOCKTON COUNTY POPULATION (2003) 613,000 POPULATION PER SQUARE MILE 438 INCORPORATED CITIES (7) ESCALON, LATHROP, LODI, MANTECA, RIPON, STOCKTON AND TRACY LAND AREA (SQUARE MILES) 1.400 LAND IN FARMS (ACRES - 1997) 808,838 TOTAL CROPLAND (ACRES - 1997) 559,435 IRRIGATED CROPLAND (ACRES - 1997) 519,021 NUMBER OF FARMS (1997) 3,862 AVERAGE SIZE OF FARMS (ACRES - 1997) 209 AGRICULTURAL WORK FORCE 15,700 LOWEST ELEVATION IN COUNTY (DELTA AREA) 12' BELOW SEA LEVEL HIGHEST ELEVATION IN COUNTY (SW AREA) 3065' ABOVE SEA LEVEL LENGTH OF COUNTY (NORTH TO SOUTH) 75 MILES WIDTH OF COUNTY (EAST TO WEST) 65 MILES AVERAGE JANUARY TEMPERATURE 53° AVERAGE JULY TEMPERATURE 93° AVERAGE ANNUAL RAINFALL NORTH COUNTY 16 INCHES EAST COUNTY 12 INCHES SOUTH COUNTY 14 INCHES

### A SPECIAL "THANK YOU"

WEST COUNTY

The San Joaquin County Agricultural Commissioner's Office expresses its deep appreciation to the





9 INCHES

for their contributions to the 2003 Crop Report. We would also like to thank the San Joaquin County Cooperative Extension for their assistance. Without their support the publication of this report would not be possible.

# AGRICULTURAL COMMISSIONER'S OFFICE SAN JOAQUIN COUNTY P.O. BOX 1809 STOCKTON, CA 95201

