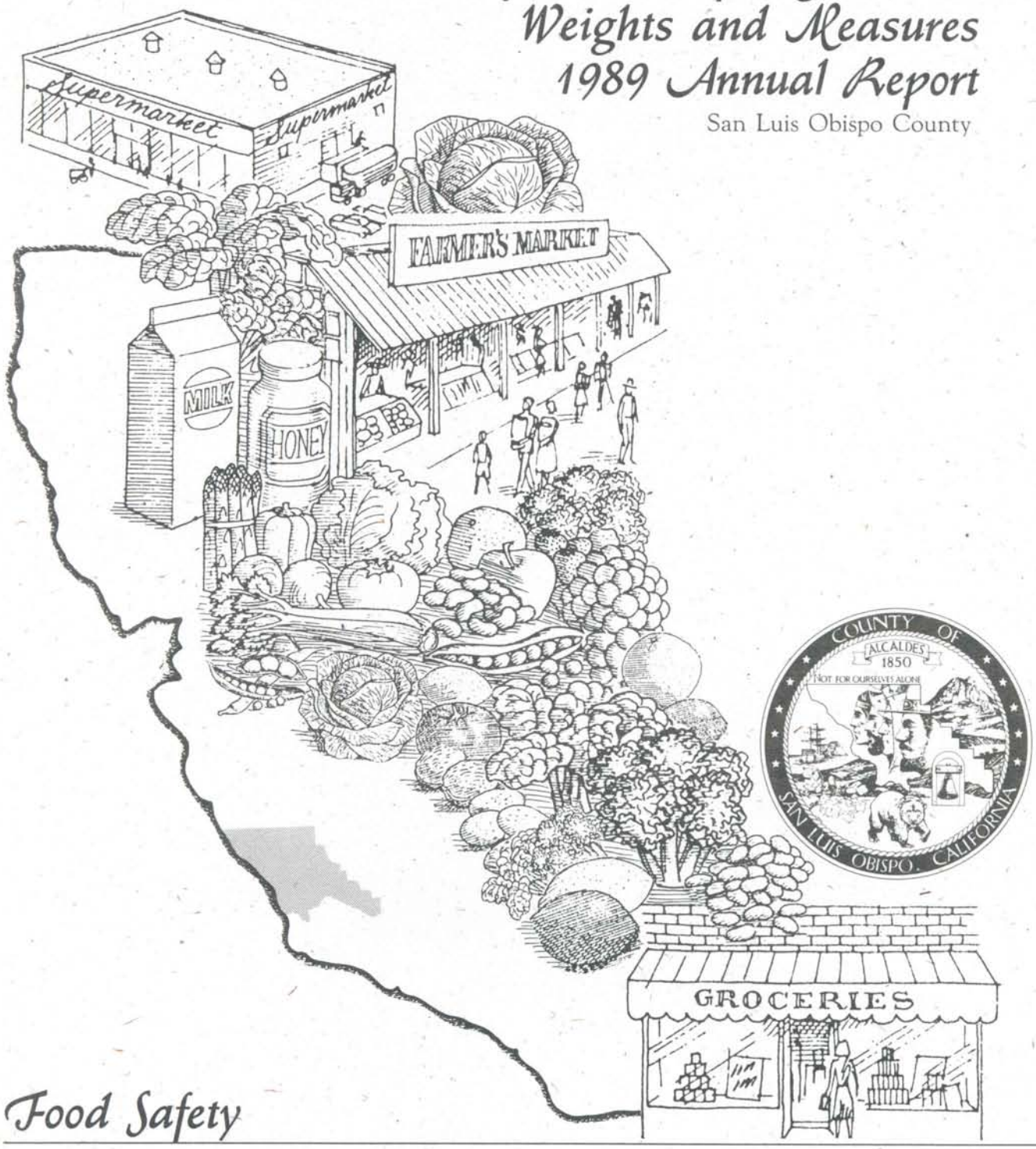
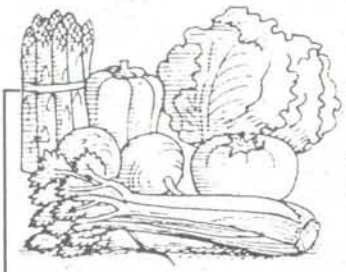
Department of Agriculture Weights and Measures 1989 Annual Report

San Luis Obispo County



Food Safety



Department of Agriculture Weights and Measures

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(805) 549-5910

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FISCAL YEAR CONTRIBUTIONS 1988-1989
Steve Hajik — Joyce Connelly
Bernarr Boaz* — Desiree Hogervorst

Bernarr Boaz retired after 16 years of service to San Luis Obispo County.

► The "presence or absence" approach towards pesticide residue incorrectly implies that any food with a pesticide residue is hazardous and that only those certified to be free of pesticides are safe.

► Despite more than 40 years of pesticide use, the cancer rate in the U.S. is declining, with the exception of lung and skin cancers, which are attributed to smoking and overexposure to sunlight.

We are pleased to recognize the county's agricultural industry through our 1989 annual report. The agricultural commodities produced during the calendar year 1989 totaled an estimated $280,703,000 in "gross receipts". This represents an all-time high as a strong vegetable industry accounts for nearly half the total value. Growth is also occurring in the fruit and nut, and nursery industries, while field crops and the animal industry are declining in value.

► California spends more than $40 million each year for the nation's most comprehensive program to regulate pesticide use.

The theme for this year's report recognizes the high level of safety afforded consumers of San Luis Obispo's farm and ranch products. Our office is actively working with the agricultural industry and public to boost confidence and improve our current food safety program. We are promoting a future that delicately balances environmental trade-offs and further establishes the foundation for sustainable agriculture.

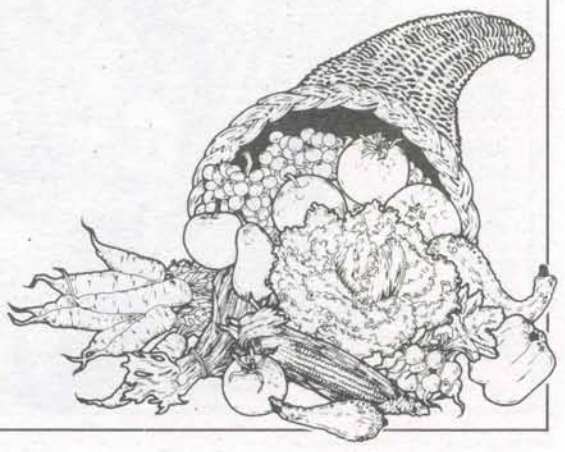
We would like to pass on our gratitude for the cooperation to all segments of agri-business which provided data and production information, and to the committed staff who compiled and finalized the report.

► Eighty percent of consumers are concerned about food safety and about 18 percent are concerned enough to be willing to pay higher retail prices for untreated food. (National Survey, U.C.B., 1989)

Sincerely,

Richard Greek

Agricultural Commissioner/Sealer



Vegetable Crops

Overall value of vegetable crops climbed to the highest ever due to a strong demand for fresh vegetables, good growing conditions, and favorable prices. Vegetable crops represent about half of the total value of agricultural production for the county.

Crop	Year	Harvested Acreage	PRODUCTION Per Acre	PRODUCTION Total	Unit	VALUE Per Unit	VALUE Total
Beans (Green)	1989	479	515	246,685	30#	$8.25	$2,035,000
	1988	408	488	199,104	30#	$9.90	$1,971,000
Bell Peppers	1989	812	971	788,452	30#	9.12	7,191,000
	1988	1,134	645	731,430	30#	5.52	4,037,000
Broccoli (Fresh)	1989	5,843	637	3,721,991	23#	4.19	15,595,000
	1988	5,820	627	3,649,140	23#	4.80	17,516,000
Broccoli (Freezer)	1989	1,520	5	7,600	Ton	360.00	2,736,000
	1988	787	5	3,935	Ton	360.00	1,417,000
Brussel Sprouts	1989	52	550	28,600	25#	6.62	189,000
	1988	66	279	18,414	25#	7.20	133,000
Cabbage	1989	716	866	620,056	45#	7.73	4,793,000
	1988	563	776	436,888	45#	3.65	1,595,000
Carrots	1989	3,480	27	93,960	Ton	128.00	12,027,000
	1988	2,813	26	73,138	Ton	132.31	9,677,000
Cauliflower	1989	1,923	585	1,124,955	25#	4.85	5,456,000
	1988	2,261	588	1,329,468	25#	5.77	7,671,000
Celery	1989	1,156	1134	1,310,904	60#	6.87	9,006,000
	1988	1,053	1171	1,233,063	60#	6.59	8,126,000
Chinese Vegetables	1989	1,378	817	1,125,826	80#	7.35	8,275,000
	1988	1,261	693	873,873	80#	6.99	6,108,000
Lettuce (Iceburg)	1989	7,633	691	5,274,403	50#	5.74	30,275,000
	1988	7,686	714	5,487,804	50#	5.28	28,976,000
Lettuce (Leaf)	1989	2,072	790	1,636,880	50#	4.75	7,775,000
	1988	1,663	848	1,410,224	50#	3.81	5,373,000
Peas (Edible Pod)	1989	4,260	597	2,543,220	10#	9.75	24,796,000
	1988	3,750	526	1,972,500	10#	9.03	17,812,000
Squash	1989	377	789	297,453	30#	4.59	1,365,000
	1988	328	646	211,888	30#	6.28	1,331,000
*Miscellaneous	1989	1,510					6,345,000
	1988	1,510					5,705,000
TOTAL VEGETABLE CROPS	1989	33,211					$137,859,000
	1988	31,103					$117,448,000

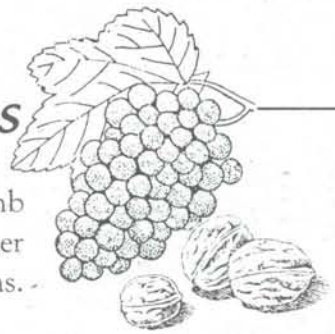
* *Anise, Artichokes, Chili Peppers, Garlic, Onions, Parsley, Parsnips, Pumpkins, Rutabagas, Radishes, Spinach, Sweet Corn, Tomatoes, Tomatillos, Turnips, Watermelons*

► Most pesticide applications are made before plants have emerged or prior to formation of edible fruits and leaves.

► Over 80% of the fruit and vegetables sampled for pesticide residue contain no detectable residues. Residues below— usually well below— the allowable levels are found in about 18% of the samples.

► One part per million is the same as one ounce to 62,000 pounds.

Fruit and Nut Crops



Total value for the fruit and nut crops has continued to climb steadily since 1987. Higher production was primarily due to younger plantings coming into full bearing and good growing conditions.

► The average American citizen spends approximately 13% of disposable income on food today (1989) compared to 25% in 1960.

Crop	Year	Bearing Acreage	PRODUCTION Per Acre	PRODUCTION Total	Unit	VALUE Per Unit	VALUE Total
Almonds	1989	4,299	0.023	99	Ton	$3,750.00	$371,000
	1988	4,782	0.011	53	Ton	$3,509.00	**$185,000
Apples	1989 ►C	443	9.370	4,151	Ton	557.50	2,314,000
	1988 ►C	430	6.630	2,851	Ton	499.00	1,423,000
Avocados	1989 ►C	1,320	3.520	4,646	Ton	1,650.00	7,667,000
	1988 ►C	1,229	1.806	2,346	Ton	1,611.00	3,779,000
Bushberries	1989	50	2.310	116	Ton	3,890.00	449,000
	1988	50	2.530	127	Ton	2,697.00	**341,000
Grapes (Wine)	1989	7,649	5.560	42,528	Ton	857.15	36,453,000
	1988	7,255	4.500	32,648	Ton	656.00	21,417,000
Kiwi Fruit	1989	102	2.520	257	Ton	1,410.00	362,000
	1988	102	2.200	224	Ton	1,871.00	**420,000
Lemons	1989 ►C	905	18.950	17,150	Ton	252.00	4,322,000
	1988 ►C	905	10.800	9,774	Ton	405.00	3,958,000
Valencia Oranges	1989	74	18.060	1,336	Ton	148.00	198,000
	1988	68	22.600	1,537	Ton	260.00	400,000
Pistachios	1989	47	0.244	11	Ton	4,163.00	48,000
	1988	78	0.190	15	Ton	3,430.00	51,000
English Walnuts	1989 ►C	3,073	0.468	1,438	Ton	827.00	1,189,000
	1988 ►C	2,962	0.442	1,309	Ton	995.00	**1,303,000
Strawberries	1989	426	22.000	9,372	Ton	646.00	6,054,000
	1988	369	24.000	8,856	Ton	826.00	7,315,000
*Miscellaneous	1989	250					519,000
	1988	250					**922,000
TOTAL FRUIT & NUT CROPS	1989	18,638					$59,946,000
	1988	18,422					**$41,122,000

* *Apricots, Asian Pears, Black Walnuts, Cherries, Feijoa, Limes, Navel Oranges, Peaches, Pears, Pepinos, Persimmons, Pomegranates, Plums, Starfruit, Table Grapes*

** *Revised*

►C *Does not meet California Agricultural Statistic service requirements for bearing acres.*

Seed Crop

Crop	Year	Harvested Acreage	Value
Vegetable	1989	96	$248,000
	1988	214	271,000
Barley	1989	364	73,000
	1988	1,500	300,000
Oats	1989	1,150	345,000
	1988	879	348,000
Wheat	1989	61	15,000
	1988	95	22,500
*Miscellaneous	1989	58	32,000
	1988	27	15,500
TOTAL SEED CROP	1989	1,729	$713,000
	1988	2,715	$957,000

* *Flower Seed*

Animal Industry

The value for the animal industry dropped substantially, by twenty-five million dollars, due to the omission of horses from the report and a continued reduction in the number of cattle sold.

Commodity	Year	Number of Head	Production	Unit	VALUE Per Unit	VALUE Total
Cattle and Calves	1989	62,500	350,300	Cwt	$74.00	$25,922,000
	1988	67,500	405,000	Cwt	$71.00	$28,755,000
Hogs	1989	4,102	8,560	Cwt	53.57	459,000
	1988	3,654	7,094	Cwt	53.38	379,000
++Horse (Work/Pleasure)	1989					
	1988	1,800		Each	1,100.00	1,980,000
++Horse (Race/Show/Investment)	1989					
	1988	1,200		Each	17,000.00	20,400,000
Market Milk	1989		127,186	Cwt	12.39	1,576,000
	1988		179,682	Cwt	11.11	1,996,000
Sheep and Lambs	1989	7,391	7,868	Cwt	72.67	572,000
	1988	10,711	11,414	Cwt	78.86	**900,000
Wool	1989		110,105	Lbs	1.40	154,000
	1988		105,642	Lbs	1.55	164,000
Honey	1989		65,420	Lbs	0.84	55,000
	1988		100,200	Lbs	0.65	65,000
*Miscellaneous	1989					2,145,000
	1988					776,000
TOTAL ANIMAL INDUSTRY	1989					$30,883,000
	1988					**$55,415,000

* *Eggs, Poultry, Goats, Game Birds, Aquaculture* ** *Revised* ++ *Horses have been dropped from the report due to lack of data.*

► Data required to register a pesticide in California are more extensive than those required for federal registration.

Nursery Stock

The nursery industry continues to grow in the county with the greenhouse producers alone having an overall value of over sixteen million dollars.

Crop	Year	Harvested Acreage	Greenhouse Production (sq. ft.)	Total
+Cut Flowers (Field)	1989	118		$4,226,000
Cut Flowers (Greenhouse)	1989		2,143,016	7,157,000
	1988		‡ 2,538,510	‡ 8,405,000
Woody Ornamentals	1989	67		2,256,000
	1988	99		2,010,000
Fruit & Nut Trees	1989	27		1,355,000
	1988	** 44		** 1,161,000
Vegetable Transplants	1989	82	1,291,952	4,920,000
	1988	100		4,190,000
Indoor Decoratives	1989		1,276,256	4,612,000
	1988		1,075,430	4,056,000
Christmas Trees, Cut	1989	74		206,000
	1988	79		297,000
*Miscellaneous	1989	10	85,000	1,200,000
	1988	26	85,000	1,559,000
TOTAL NURSERY STOCK	1989	378	4,796,224	$25,932,000
	1988	**347	3,698,940	**$21,678,000

* *Herbaceous Perennials, Herbs, Specialty Plants* + *New Category* ** *Revised* ‡ *Includes field grown*

► Over 80% of the fruit

► The fundamental principle of toxicology states that the risk from exposure to a substance depends upon the dose of the substance and not just its presence.

► Removing pesticides from agricultural practices will not yield zero-risk food.

Field Crops

Field crop values continued to drop due to the drought, lack of profit to the grower, and the Federal Conservation Reserve Program. The value of barley dropped four and one-half million dollars alone.

Crop	Year	Harvested Acreage	PRODUCTION Per Acre	PRODUCTION Total	Unit	VALUE Per Unit	VALUE Total
Alfalfa Hay	1989	5,000	6.50	32,500	Ton	$125.00	$4,063,000
	1988	5,100	6.60	33,660	Ton	$102.00	$3,433,000
Barley	1989	45,000	0.85	38,250	Ton	116.00	4,437,000
	1988	62,500	1.30	81,250	Ton	122.00	9,913,000
Garbanzo	1989	525	3.50	1,838	Cwt	35.00	64,000
	1988	715	6.50	4,648	Cwt	21.00	98,000
Grain Hay	1989	35,000	2.15	75,250	Ton	105.00	7,901,000
	1988	32,000	2.45	78,400	Ton	78.00	6,115,000
Grain Stubble (Grazing)	1989	112,500			Acre	4.00	450,000
	1988	92,000			Acre	4.00	368,000
Irrigated Pasture	1989	5,600			Acre	200.00	1,120,000
	1988	5,600			Acre	200.00	1,120,000
Rangeland, Dryland	1989	1,060,000			Acre	5.50	5,830,000
	1988	1,065,000			Acre	5.50	5,858,000
Safflower	1989	1,500	0.35	525	Ton	290.00	152,000
	1988	2,500	0.35	950	Ton	255.00	242,000
Wheat	1989	12,000	0.65	7,800	Ton	135.00	1,053,000
	1988	25,000	0.95	23,750	Ton	118.00	2,803,000
*Miscellaneous	1989	1,200					300,000
	1988	1,500					290,000
TOTAL FIELD CROPS	1989	1,278,325					$25,370,000
	1988	1,291,915					$30,240,000

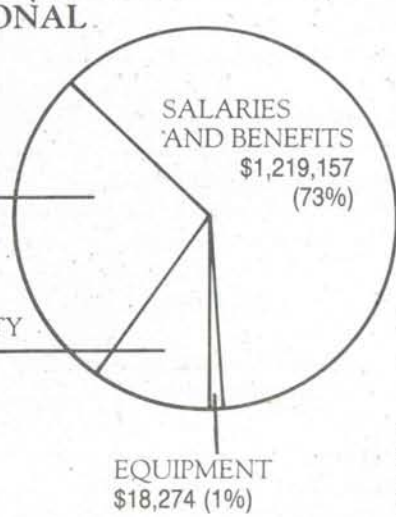
* *Silage Corn, Dry Beans, Sudangrass, Winter Forage*

► PARTS PER TRILLION
Interesting Comparisons...
1 square inch is to 250 square miles
1 bogey is to 3,500,000,000 golf tourneys
1 postage stamp is to an area the size of Dallas, Texas
1 flea is to 360,000,000 elephants

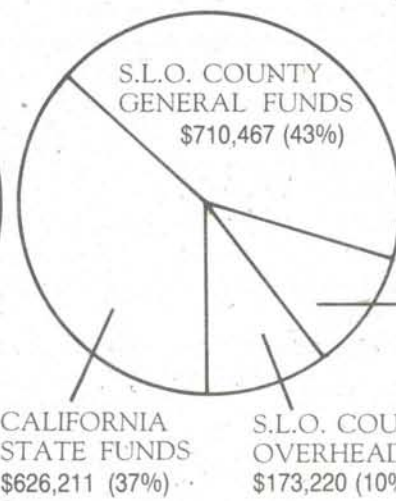
Financial Report & Program Review

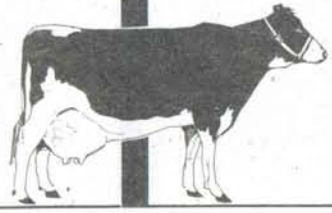
FY 88/89

EXPENDITURES AND OPERATIONAL COSTS



REVENUE AND FUNDING SOURCES





TOTAL BUDGET $1,682,782

Financial Report & Program Review

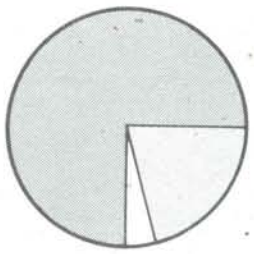
ENVIRONMENTAL PROTECTION

The Pesticide Use Enforcement program had a very busy year implementing new Worker Health and Safety Regulations placing emphasis on public health and safety. The department participated in 23 training sessions, up from five for the previous fiscal year. These sessions provided an opportunity for industry to learn more about the rationale behind the regulations and the importance of compliance.

Keeping an ever watchful eye on pesticide applications to ensure that safety requirements were met, the staff conducted 1,084 field inspections. Documentation of the safe storage, handling and use of pesticides was another area of concern which received attention. Record audits were conducted at 115 sites to verify compliance with documentation requirements.

Responding to the needs and concerns of the community, staff completed 42 investigations involving pesticide related complaints.

Enforcement action was taken in 651 cases of noncompliance with pesticide use requirements. Eleven of these cases resulted in administrative civil penalties which amounted to $2,400. The department successfully prosecuted one court case involving the illegal use of a pesticide on a food commodity.



TOTAL FUNDING
$345,489

State Funds	75.0%
County Funds	21.0%
Collected Fees	4.0%

Another component of the Pesticide Use Enforcement program involved the preharvest sampling of crops to detect any illegal pesticide residues which might be present. Samples were collected periodically at a number of locations and sent to the state's laboratory for analysis. Preharvest sampling is another way in which staff works to ensure a safe food supply.

The Hazardous Materials disclosure program was instituted for agriculture to protect emergency response personnel. Hazardous materials storage sites must be clearly marked to warn response personnel of the threat of toxic fumes which may be generated at these storage sites in the event of a fire or other disaster. Compliance with the requirements of this program has increased as people become more aware of safety issues.

As the complexity of the Pesticide Use Enforcement program has grown, the need to utilize available technology to improve efficiency has become more apparent. Computerization of the restricted materials permit application process was a logical step and a significant accomplishment in 1989. The transition required patience and perseverance on the part of both growers and staff. The benefits of the new system have supported the change.

► The presence of natural toxins in food is often higher than synthetic chemical residues.

MEASUREMENT STANDARDS

The Measurement Standards staff are responsible for guaranteeing that equity prevails in all commercial transactions involving weight, count and time. Staff responsibilites can be divided into six areas of concern:

Weighing Devices— Grocery store and commercial truck scales are examples of weighing devices which must be certified for accuracy.

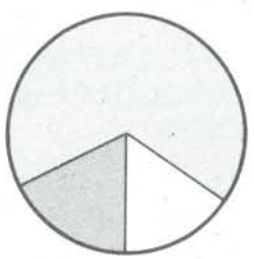
Measuring Devices— Gasoline pump and taxi meters are two types of measuring devices which are inspected.

Electric Meters— Staff checks the accuracy of those meters which are not under the jurisdiction of the Public Utilities Commission.

Compressed Gases— Butane and propane dispensers are examples of devices which are inspected and certified by staff.

Quantity Control— Staff verifies that packaged commodities for sale contain the stated net contents.

Petroleum Weighmaster— Truth-in-labeling for petroleum products is another area of special concern for staff. The weighmaster notarizes certificates of weight and/or count whenever a buyer is not present.



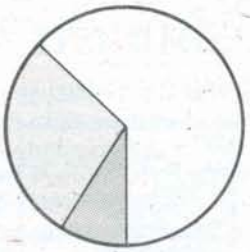
TOTAL FUNDING
$125,756

State Funds	17.5%
County Funds	67.0%
Collected Fees	15.5%

A highlight of the accomplishments for this year was the completion of the vapor meter lab. The lab, which has been approved by the State Division of Measurement Standards, will be used to institute a complete testing program in 1990. The Measurement Standards program has been restructured to emphasize investigative work in the areas of quality control, petroleum, and weighmaster operations. Enforcement efforts continue to demand a larger portion of the staff's time as our county's commercial community continues to grow at a rapid rate.

Financial Report & Program Review

PRODUCT QUALITY



TOTAL FUNDING
$75,470

State Funds	9.0%
County Funds	28.0%
Collected Fees	63.0%

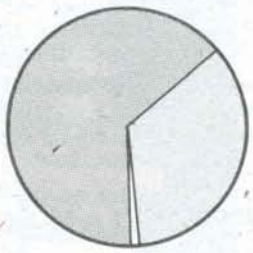
The Product Quality Program plays a vital role in providing consumers with the assurance of quality in the market place. A variety of produce and commodities were inspected throughout the year to ensure that state and federal quality standards are met. For example, lettuce was inspected for decay, insect damage, and maturity. Nursery stock was inspected for accurate labeling and the absence of pests and disease, while crop and garden seed has undergone inspection for noxious weed contamination, quality, and proper germination requirements. In addition, eggs were examined for shell defects and salmonella for public health protection.

This year, the agricultural staff developed a one-round lettuce inspection system, which greatly improved the efficiency of the inspection services. The number of locations visited dropped from 3,786 to 3,495, while the number of cartons statistically sampled remained at over 5,000,000.

For those who enjoy the street fair atmosphere and the benefits of direct marketing of farm produce, Farmers' Markets have become somewhat of an institution in our county. The popularity of these markets keeps growing. The 11 market locations rank San Luis Obispo County second among all California counties in the number of market locations. The Product Quality staff played a vital, behind-the-scenes role in assuring that the produce marketed measures up to quality standards and that the producers are properly certified. The agricultural staff made 49 inspections at market locations from Arroyo Grande to Paso Robles and a total of 172 farmers were certified.

► By the way, if there are any typographical errors in this booklet, the equivalent of one part per trillion would be one error among all the words of all the front page stories in all the issues of more than 2,000 daily newspapers in the United States if their publication had started with the invention of moveable type for the printing press!

PEST PREVENTION



TOTAL FUNDING
$263,924

State Funds	64.0%
County Funds	35.0%
Collected Fees	1.0%

The Pest Prevention Program seeks to protect local agriculture, urban areas, and the environment from the threat of exotic pest introductions. Realizing that preventing the establishment of such pests here is a much less costly and environmentally acceptable alternative than treatment of pest outbreaks, the staff utilizes a three-pronged protection strategy:

Pest exclusion focused on incoming and outgoing shipments of agricultural and other host products. These shipments were carefully inspected for the presence of "hitchhiking" pests of quarantine significance.

Pest detection specialists were busy placing and monitoring traps throughout the county. These traps are designed as quick indicators of introductions of serious pests.

Pest eradication forces swing into action in response to information provided by pest exclusion and pest detection efforts. The goal of pest eradication is to effectively eliminate pests which have particularly destructive potential.

An overall increase in the number of pest exclusion inspections, totaling 11,937 shipments coming into the county were checked. Eight were found to be infested with serious pests, while 49 were rejected for violations of state, federal, or foreign quarantines.

The department's nematology laboratory, completed in 1989, is now operating to provide faster and more accurate analysis of soil and plant samples taken from incoming shipments for the presence of plant parasitic nematodes.

► Produce labelled "no-spray" or "no pesticides" does not necessarily mean that no chemicals were used to grow it.

Origin certification of agricultural commodities increased dramatically from 592 to 910 shipments inspected and certified for export. Citrus, celery transplants, and overseas vegetable exports were shipped out of San Luis Obispo County.

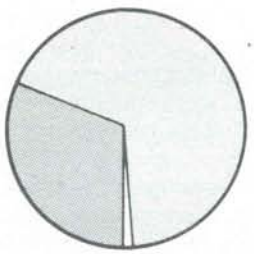
A Mexican Fruit Fly, detected in late 1988, contributed to an increase of over 40,000 trap servicings by the detection staff.

Weed eradication efforts were directed at skeleton weed, artichoke thistle, and white horsenettle. Populations of these pests were sucessfully reduced, while new problem areas were identified through field surveys.

The Apiary Program staff focused their attention on inspections for the detection of harmful bee pests, such as American foulbrood disease, and varroa mite. Abatement of diseased colonies is one way in which we were able to assist beekeepers by ensuring the health of the bee industry in San Luis Obispo County. Enforcement of the County Bee Ordinance helped to minimize the number of complaints received.

Financial Report & Program Review

ADMINISTRATION & SPECIAL SERVICES



TOTAL FUNDING
$486,415

State Funds	31.0%
County Funds	68.0%
Collected Fees	1.0%

Recognized throughout the state for his outstanding leadership ability, diligence, and progressive style, the Agricultural Commissioner was selected to lead the California Agricultural Commissioners and Sealers Association. This honor reaffirms the county's developing position of influence within the state. Having successfully provided statewide leadership as Vice-President in charge of Weights and Measures Affairs in the previous term, the president-elect will assume his new post in Spring, 1990.

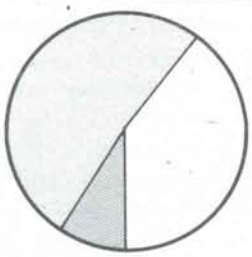
Issues related to land use planning and the emergency nuclear rersponse plan continued to grow in number and complexity. Reflective of this growth, a new Deputy Agricultural Commissioner position was added to handle the increased workload in those areas.

The Agricultural Commissioner's office was catapulted from the periphery to the core of many land use planning issues as conflicts between the agricultural and urban elements continued to escalate. The staff is charged with the duty of protecting agriculture and providing a margin of safety for the public through detailed evaluation of impacts associated with development in agricultural areas and through mitigation measures which are recommended to the county Board of Supervisors. The staff also provides technical and policy information. Through the Board of Supervisors, the department established the use of as "agricultural buffer" as an effective tool in reducing land use conflicts at the agricultural urban interface. The department also worked on the county's Land Conservation Act and assisted in the development of an agricultural element to the county's General Plan.

The department's role in the nuclear response planning process continues to present new challenges to the staff. Focused on the goal of protecting the public through preparedness for a potential emergency at the Diablo Canyon nuclear power plant, the staff successfully completed Ingestion Pathway Zone (IPZ) policies and procedures. The policies and procedures have been incorporated in the county's overall plan and are being used as a statewide model. Future challenges include automating agriculture land use data through computer data base files and ultimately computer mapping and graphics.

► Man-made pesticides were designed after the ones created by nature.

PEST MANAGEMENT



TOTAL FUNDING
$212,109

State Funds	9.0%
County Funds	51.5%
Collected Fees	39.5%

The vertebrate pest management staff responded to innumerable requests for control information. Ground squirrels were, of course, the primary instigators of such requests, with mice, rats, and birds also causing their share of problems. Components of a response to a pest control inquiry included pest identification, site analysis, discussion of appropriate site specific control options, and education on the safe and lawful use of the control methods selected.

Working cooperatively with the U.S. Fish and Wildlife and California Department of Fish and Game personnel to ensure compliance with regulations, the vertebrate pest management staff carefully monitored the discriminatory use of treated bait for the control of ground squirrels. Staff has continued to give special attention to the protection of endangered species. Extensive surveys and communications with U.S. Fish and Wildlife contributed to the development of sophisticated maps identifying the ranges of local endangered species.

Education has been and will continue to be a major part of the vertebrate pest management program. Helping both the rural and urban segments of the population to understand complex issues and environmental considerations involved with pest management decisions is a valuable service.

The weed management program focuses on the task of limiting the spread of noxious weeds along county and state right-of-ways. Managing weed problems on these right-of-ways serves to protect adjacent farmlands and natural areas from invasion by troublesome weed populations. Limited resources coupled with a seemingly limitless network of roads and never ending introductions of weed seeds are a few reasons why the job never seems to end. Safety to both the applicator and the public is always a priority, as well as protection of non-target crops and livestock. An overall 933 acres of weeds on right-of-way were treated in 1989. A highlight of the year's accomplishments was the modification of the spray equipment to provide for more efficient use of time and materials.

Crop & Commodity Value 10-Year Comparison

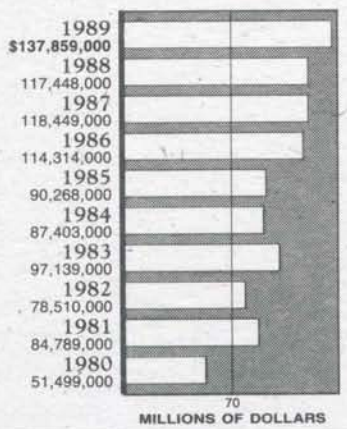
► "Farmer's families eat the same food that urban families do and farmers feel the same responsibilities toward their families that their urban counterparts do." (L.T. Wallace, UCB)

TOP 20 CROP & COMMODITY VALUES 1989

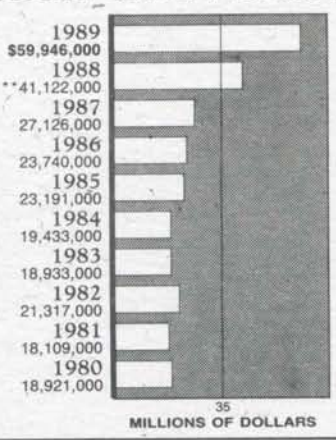
1	WINE GRAPES	$36,453,000
2	LETTUCE (Iceberg)	30,275,000
3	CATTLE (& Calves)	25,922,000
4	POD PEAS (Edible)	24,796,000
5	BROCCOLI	15,595,000
6	CARROTS	12,027,000
7	CELERY	9,006,000
8	VEGETABLES (Chinese)	8,275,000
9	GRAIN HAY	7,901,000
10	LEAF LETTUCE	7,775,000
11	AVOCADOS	7,667,000
12	BELL PEPPERS	7,191,000
13	CUT FLOWERS	7,157,000
14	STRAWBERRIES	6,054,000
15	RANGELAND (Dryland)	5,830,000
16	CAULIFLOWER	5,456,000
17	TRANSPLANTS (Vegetable)	4,920,000
18	CABBAGE	4,793,000
19	DECORATIVES (Indoor)	4,612,000
20	BARLEY	4,063,000

► "How safe is safe?... Consumers seek safe food. Today, however, there is no consensus about safety..."

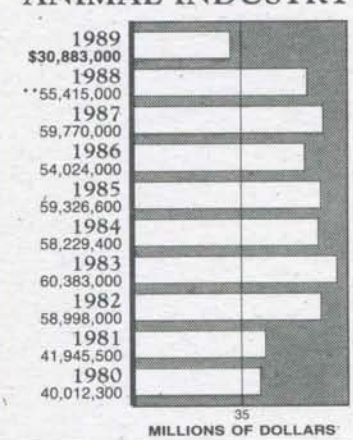
VEGETABLE CROPS



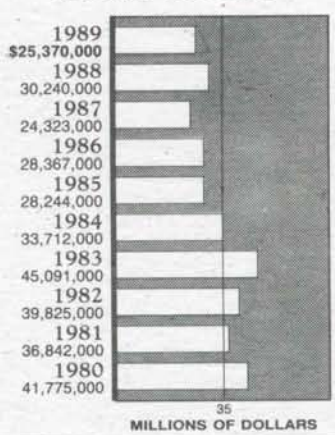
FRUIT & NUT CROPS



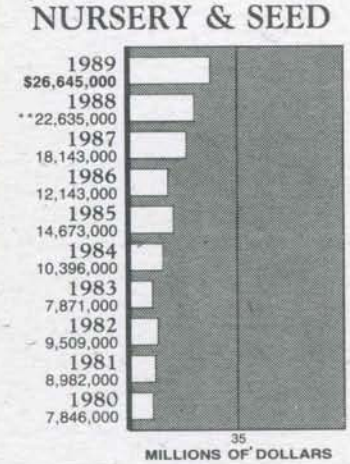
ANIMAL INDUSTRY



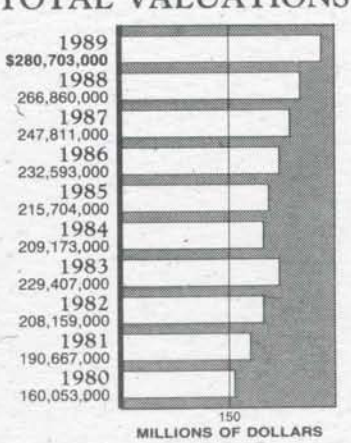
FIELD CROPS

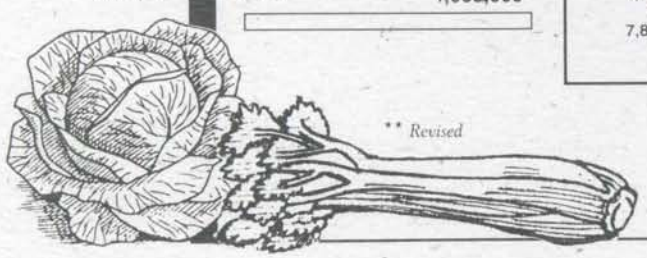


NURSERY & SEED



TOTAL VALUATIONS





** *Revised*

TOTAL AGRICULTURAL ACREAGE

1989 **1,330,552** 1988 **1,344,502

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