

SAN Department of Agriculture
LUIS Weights and Measures
OBISPO Annual Report
COUNTY 1991



focus on

SUSTAINABLE AGRICULTURE



Janis Padgett

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Suite A
San Luis Obispo, CA 93401

LETTER FROM THE COMMISSIONER

To: Honorable Board of Supervisors
Mr. Harry Ovitt, District I
Mr. Laurence L. Laurent, Chair, District II
Ms. Evelyn Delany, District III
Ms. Ruth Brackett, District IV
Mr. David Blakely, District V

And: Mr. Robert Hendrix, San Luis Obispo County Administrative Officer
Mr. Henry Voss, California Department of Food and Agriculture

We respectfully submit our annual report which features San Luis Obispo county's agriculture industry outputs for 1991. Agricultural commodities produced in 1991 totaled an estimated \$260,597,000 in "gross receipts." This figure represents the total farmgate value of local agricultural commodities and does not reflect the agriculture industry's net economic return. The total value dropped for the second consecutive year and is about \$20 million less than the all-time high reported in 1989. The downturn in the nation's economy, generally depressed commodity prices and the lingering California drought all contributed to the overall decline.

This year's theme highlights sustainable agriculture. Faced with ever-increasing challenges from environmental issues and resource competition, agriculture is responding with innovation in pest management practices, soil and water conservation, and new cropping practices. This is accomplished while still upholding the traditional role of providing a safe, abundant, and high-quality food supply at a reasonable cost to consumers. This is a tall order indeed and we have directed this year's report to the consumer. The consumer's involvement in food production is their inescapable link to agriculture: *we all eat*.

We extend our appreciation to all sectors of the agricultural community for assisting us in gathering the information, and to the staff who compiled and finalized the report.

Sincerely,



Richard Greek
Agricultural Commissioner/Sealer

"Plant and animal diversity can be combined to form an inner harmony – where economics and ecology will eventually meet."
–Traugher Groh, farmer



"The appropriate measure of farming is the world's health and our health."
–Wendell Berry



"It seems to go against the grain—
Here in this land of opportunity,
Here in these times of uncertainty,
Who will feed the soil?"
–Tret Fure

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“Sustainable Agriculture is an on-going process within which farmers work to refine and improve their relationship with the land, leaving both better off in the exchange.”

David Granatstein, Land Stewardship Project, Minnesota



AGRICULTURAL CHALLENGES

- Increased production costs
- Meeting mass food needs
- Water shortages
- Environmental regulations
- Soil preservation
- Chemical usage
- Chemical resistance to pests

SUSTAINABLE AGRICULTURE SOLUTIONS

- Improve tillage and grazing
- Alternative crop selection
- Crop rotation
- Irrigation efficiency
- Chemical reduction
- Biological pest control

CONSUMER'S PART

- Recycle – reuse – respond
- Minimize consumption
- Accept blemished fruits & vegetables
- Be willing to pay for preservation of land, water, air quality, soil
- Try new and alternate foods

“From Farmhouse to Our House: Eating is a political act.”

Wendell Berry

CONCEPTS IN PROGRESS

TOWARD A SUSTAINABLE FUTURE

- Minimum tillage to reduce fuel use and preserve soil health
- Rotational grazing and increasing water troughs to decrease soil erosion in the Morro Bay Watershed Project
- Water conservation through drip systems
- Agricultural zoning to reduce housing/farming conflicts
- Improved harvesting technology, such as night harvesting for increased quality
- Integrated Pest Management practices continue to increase: local strawberry growers are decreasing pesticide applications due to assistance from predatory mites
- Soil conservation with rotational crops, mulching, and cover crops
- Alternative foods and efficient resource use, such as ostrich farming
- New legislation: Organic Foods Act
- Supplement cattle with feed unsuitable for human consumption
- Diversify crops on farms to decrease the problems of monocultures and make use of on-farm manures.
- Soil testing to decrease fertilizer usage



"So far we have only colonized America. As we now begin to wisely and frugally see our whole potential, we begin the real discovery of America."

Kathy Krause



REPORT: SUSTAINABLE AGRICULTURE IN SAN LUIS OBISPO COUNTY

BIOLOGICAL CONTROL COUNTY PROGRAM

Pest	Type of Organisms	# of Sites	Crop/Acreage Involved
Four Weed Pests	Six control organisms; stem and seedhead weevils, gall midges, and leaf-mining moths	23	Pasture noncrop rangeland
Six insect pests	Eight control organisms; parasitoid wasps, predaceous mites, bacteria	117	Home garden (citrus), street trees, alfalfa, greenhouse (chrysanthemums)

SOIL CONSERVATION

U.S.D.A. Conservation Reserve Program 101,678 acres

ORGANIC FARMS

Crops: Almonds, apples, livestock melons, vegetables, walnuts 17 farms 601 acres

PEST PREVENTION

Pest Interceptions 180



"Real change comes about when farmers, environmentalists, and food industry representatives sit at the same table to hammer out solutions that are good for people, good for animals, and good for the earth."

Fred Kirschenmann, biodynamic farmer, and cattle rancher



PEST PREVENTION

Keeping foreign pests out, such as medfly, is much less costly and more environmentally acceptable than the treatment of pest outbreaks. We inspect incoming shipments daily at our post offices, shipping companies, airports, and nurseries. Some unmarked packages carrying plant material (which are illegal) may get by us. Perhaps a box of home-grown fruit sent by a backyard gardener to a friend in San Luis Obispo could carry pests that we don't have here. To catch these possible pests, we have up to 27 insect traps per square mile in our cities.

1991 Achievements

- 12,065 shipments were inspected and 36 serious pests intercepted
- 20,000 insect trap inspections

1992 Developments

- Increased work load
- Increased exporting of nursery stock and produce
- Expanded enforcement

PRODUCT QUALITY

Why is market place lettuce so pristine? There are legal standards that tell us how much insect damage, decay, and maturity is allowed. There are also high standards for nursery stock, seed and eggs. Are the products at Farmer's Market really locally grown, or are you being sold leftovers from the valley packinghouses? We certify local growers and make frequent inspections to guarantee that produce is sold directly from producer to consumer.

1991 Achievements

- Statistically sampled over 5,000,000 cartons of lettuce
- Implemented California Organic Act of 1990

1992 Developments

- Nursery industry continues to grow

LAND USE

This is a fast-growing and important agricultural program. We assist in preventing agricultural/residential conflicts through review of development proposals. We participate in the preparation of the Agricultural Element of the County General Plan and the County's Agricultural Preserve Program. Evaluation of proposed subdivisions of agricultural property is a major task. We are able to provide vital agricultural land use information in the event of an accident at Diablo Canyon Nuclear Power Plant.

1991 Achievements

- 125 land use projects reviewed
- Mapped and computerized 829 agricultural properties

1992 Developments

- Food supply protection for nuclear emergency

PEST MANAGEMENT

Worried about the Africanized Bee? We're working on some solutions anticipating their arrival. Biocontrols are used to manage insect and weed pest problems. Refined habitat maps are being developed for the protection of endangered species.

Ground squirrels are a major problem to growers. There is an increasing lack of predators and traditional poisons have been banned. We have conducted field trials to evaluate alternative materials and methods of control.

1991 Achievements

- 390 acres of road right-of-ways treated for noxious weeds
- Sponsored two biocontrol seminars

1992 Developments

- Participation in the Morro Bay Watershed efforts
- Public education for Africanized Bee

ENVIRONMENTAL PROTECTION

Regulating the use of pesticides is our largest program. We do this through enforcement, user education, protecting agricultural workers, sampling for pesticide residues, monitoring use, collecting and reviewing data. Hazardous material sites are registered at our office. We insure that they are correctly identified for an emergency response such as a spill or fire.

1991 Achievements

- 55% more field inspections
- 21% more records inspections
- Streamlining of pesticide incident reports
- Computerization of permits and use reporting

1992 Developments

- Outreach efforts for growers
- Disposal of unwanted agricultural chemicals
- Computerized mapping of pesticide use reports
- Field inspection computerization

MEASUREMENT STANDARDS

Fairness is our business. Things that you buy, such as groceries and gasoline are tested for correct weight, measure, count or time. We protect everyone from purchasing goods that are "short" weight or measure.

1991 Achievements

- Implemented a new program to test scanner and price lookup systems in grocery and retail stores
- Combined efforts with Air Pollution Control District for testing gasoline vapor recovery systems

1992 Developments

- Combining efforts with staffing of agencies for efficiency
- Computerized field inspections

California's organic production has doubled every year for the past five years.

(Committee for Sustainable Agriculture)





Supervising Administrative Clerk
Judy A. Noble

Administrative Services Staff

John Gorman	Erin McCoy
Linda Leos	Bette Presley
Hilary White	Troy Wolverton

Agricultural Inspector Biologists

Chuck B. Alender	Tamara Kleeman
Chris Browning	Dennis Knowles
P. Kim Cairns	Catherine Krause
Janice Campbell	Richard Little
Alicia Doran	Peggy McKie
Beverly Gingg	Julie Oxford
Judy Groat	Brenda Protopapas
Rusty Hall	John Schmitz
Mary Hertel	Jennifer Welch/Cosko

**Agricultural Commissioner/
Sealer of Weights and Measures**

Richard D. Greek

Assistant Agricultural Commissioner

Robert F. Lilley

Chief Deputy Sealer of Weights and Measures

Stephen F. Morrison

Deputy Agricultural Commissioners

Christine E. Crump

Robert Hopkins

Rick Landon

Brenda W. Ouwerkerk

Measurement Standards Inspectors

Jan G. Hendrix	Robert Lopez
Lance C. Millsbaugh	

Agricultural Measurement Standards Aides

Marline Bartsch	Christine Linne
Roxy McIntosh	Janine Newby
Gail Perez	Ed Virgin

Current Temporary Employee: Jody Olson

Current Contract Employee: Craig Rossier

Fiscal Year Contributions 1990 - 1991

Charlean Bogan	Ray House
Jodi Kinzler	Gisele Schoniger



Fiscal Year 90/91

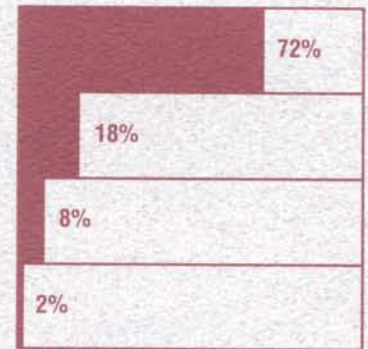
EXPENDITURES

Salaries & Benefits
\$1,551,667

Services & Supplies
\$387,621

Overhead
\$183,444

Equipment
\$35,280



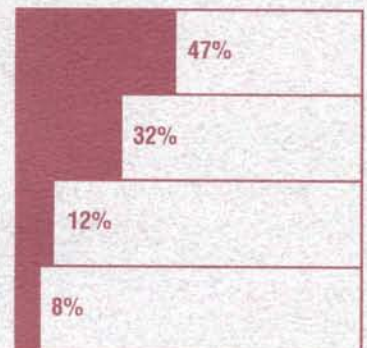
REVENUE

General Funds
\$1,024,961

State Funds
\$690,789

Collected Fees
\$258,818

Overhead
\$183,444



Category	State Funds	County Funds	Collected Fees
ADMINISTRATION* Total Funding: \$612,566	33%	67%	0%
AGRICULTURAL RESOURCES Total Funding: \$150,467	9%	89%	2%
MEASUREMENT STANDARDS Total Funding: \$149,666	24%	62%	14%
ENVIRONMENTAL PROTECTION Total Funding: \$531,136	52%	41%	8%
PEST MANAGEMENT Total Funding: \$273,735	7%	72%	20%
PRODUCT QUALITY Total Funding: \$93,695	2%	17%	80%
PEST PREVENTION Total Funding: \$332,760	50%	48%	2%

* Includes employee benefits, clerical, utilities, general supplies, office automation supplies and upgrades.

FRUIT & NUT CROPS



Although acreage declined, the overall value gained some from 1990. The freeze of 1990 and the continuing drought hurt crops like avocados while favorable growing conditions benefited other crops. Wine grapes overall made a modest rebound moving back into the top value crop.

Crop	Year	Bearing Acreage	PRODUCTION		Unit	VALUE	
			Per Acre	Total		Per Unit	Total
Almonds	1991	2,799	0.004	11	Ton	\$3,910.00	\$44,000
	1990	3,299	0.011	36	Ton	\$4,067.00	\$148,000
Apples	1991	565	8.770	4,995	Ton	457.00	2,264,000
	1990	❖ 469	7.250	3,400	Ton	349.20	1,187,000
Avocados	1991	1,165	1.160	1,351	Ton	1,610.00	2,176,000
	1990	1,220	1.370	1,671	Ton	2,250.00	3,761,000
Bushberries	1991	50	4.680	234	Ton	3,520.00	824,000
	1990	50	3.550	178	Ton	4,438.00	788,000
Grapes (Wine)	1991	8,100	5.320	43,092	Ton	793.00	34,172,000
	1990	8,150	4.410	35,942	Ton	876.15	31,490,000
Kiwi Fruit	1991	60	.0720	43	Ton	718.00	31,000
	1990	60	1.730	104	Ton	1,429.00	148,000
Lemons	1991	882	14.900	13,142	Ton	342.00	4,494,000
	1990	905	16.350	14,797	Ton	277.00	4,099,000
Pistachios	1991	64	0.700	45	Ton	3,470.00	155,000
	1990	47	0.605	28	Ton	2,941.00	84,000
Strawberries	1991	518	18.800	9,738	Ton	728.00	7,090,000
	1990	596	22.731	13,548	Ton	700.00	9,483,000
Valencia Oranges	1991	150	11.190	1,679	Ton	463.00	777,000
	1990	❖ 134	8.220	1,101	Ton	179.00	197,000
Walnuts (English)	1991	2,770	0.380	1,053	Ton	1,040.00	1,095,000
	1990	2,970	0.360	1,069	Ton	969.00	1,036,000
*Miscellaneous	1991	406					1,624,000
	1990	320					1,120,000
TOTAL FRUIT & NUT CROPS	1991	17,529					\$54,746,000
	1990	18,220					\$53,541,000

* Apricot, Asian Pear, Black Walnut, Cherry, Feijoa, Fig, Grapefruit, Lime, Navel Orange, Peach, Pear, Persimmon, Pomegranate, Plum, Table Grape, Starfruit, Pepino, Raisin Grape, Tangelo.

❖ Does not meet California Agricultural Statistics service requirements for bearing acres.

SEED CROPS



Crop	Year	Acreage	Harvested Value
Barley	1991	605	58,000
	1990	400	80,000
Oats	1991	885	241,000
	1990	885	278,000
*Miscellaneous	1991	360	246,000
	1990	** 465	250,000
TOTAL SEED CROP	1991	1,850	\$545,000
	** 1990	1,750	\$608,000

* Vegetable, wheat, dry bean, garbanzo, flower

** Revised



ANIMAL INDUSTRY



Drought conditions continued to take a toll on the animal industry with all major animal groups declining in production. Prices for cattle remained strong while prices for other animals dropped off.

Commodity	Year	Number of Head	Production	Unit	VALUE	
					Per Unit	Total
Cattle and Calves.....	1991	56,000	280,000	Cwt	\$85.00	\$23,800,000
	1990	60,000	315,000	Cwt	\$80.00	\$25,200,000
Hogs.....	1991	4,019	8,277	Cwt	59.80	\$495,000
	1990	4,313	9,180	Cwt	64.00	\$588,000
Honey.....	1991		221,000	Lbs	0.50	111,000
	1990		51,500	Lbs	0.52	27,000
Market Milk.....	1991		80,984	Cwt	11.19	906,000
	1990		**127,951	Cwt	12.08	1,546,000
Sheep and Lambs.....	1991	7,141	7,654	Cwt	45.80	351,000
	1990	7,807	9,072	Cwt	56.00	508,000
Wool.....	1991		102,000	Lbs	0.75	77,000
	1990		110,000	Lbs	1.36	150,000
*Miscellaneous.....	1991					700,000
	1990					2,257,000
TOTAL ANIMAL INDUSTRY.....	1991					\$26,440,000
	1990					\$30,276,000

* Eggs, Poultry, Goats, Game Birds, Aquaculture

** Revised

NURSERY STOCK



The nursery industry posted a small gain over the record values of 1990. The sharp downturn in the economy generally contributed to a reduction in overall production and a leveling off of value.

Harvested Crop	Greenhouse Year	Acreage	Production (Sq.Ft.)	Value
Christmas Trees, Cut....	1991	92		\$224,000
	1990	110		\$183,000
Cut Flowers (Field).....	1991	114		6,023,000
	1990	187		4,945,000
Cut Flowers (Greenhouse).....	1991		2,048,000	8,197,000
	1990		2,150,525	9,620,000
Fruit & Nut Trees.....	1991	28		1,405,000
	1990	28		1,400,000
Indoor Decoratives.....	1991		864,000	7,884,000
	1990		1,322,350	7,800,000
Ornamentals.....	1991	41	120,000	2,442,000
	1990	48		2,340,000
Vegetable Transplants.....	1991	98		8,750,000
	1990	** 90		6,967,000
*Miscellaneous.....	1991	5	75,000	600,000
	1990	12	209,000	1,794,000
TOTAL NURSERY STOCK.....	1991	378	3,107,000	\$35,525,000
	1990	** 475	3,681,875	\$35,049,000



* Herbs, Specialty Plants, Cacti, Succulents

7 ** Revised

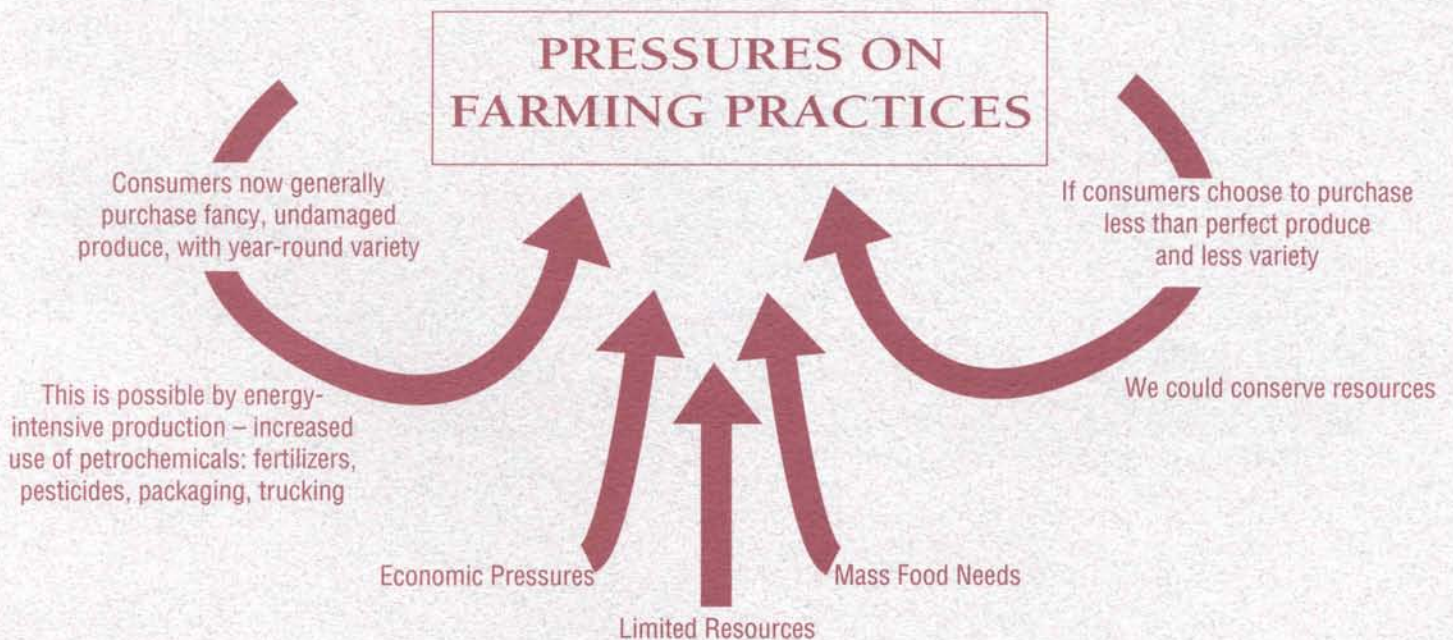
FIELD CROPS



Field crops declined only slightly compared to 1990. Although dry-farmed crop yields per acre increased, weak commodity prices and little relief from the drought continued to plague this crop group.

Crop	Year	Harvested Acreage	PRODUCTION		Unit	VALUE	
			Per Acre	Total		Per Unit	Total
Alfalfa Hay	1991	3,480	5.50	19,140	Ton	\$100.00	\$1914,000
	1990	4,200	5.40	22,680	Ton	\$122.00	\$2,767,000
Barley	1991	28,000	0.80	22,400	Ton	100.00	2,240,000
	1990	35,000	0.62	21,700	Ton	110.00	2,387,000
Grain Hay	1991	30,000	1.90	57,000	Ton	78.00	4,446,000
	1990	32,500	1.54	50,050	Ton	100.00	5,005,000
Grain Stubble (Grazing)	1991	90,000			Acre	3.75	338,000
	1990	96,250			Acre	3.60	347,000
Irrigated Pasture	1991	5,600			Acre	350.00	1,960,000
	1990	5,600			Acre	250.00	1,400,000
Rangeland, Dryland	1991	1,040,000			Acre	5.00	5,200,000
	1990	** 1,015,000			Acre	5.00	5,075,000
Safflower	1991	1,600	0.40	640	Ton	207.00	132,000
	1990	750	0.35	263	Ton	250.00	66,000
Wheat	1991	3,865	0.65	2,512	Ton	90.00	226,000
	1990	5,025	0.58	2,915	Ton	105.00	306,000
*Miscellaneous	1991	1,600					533,000
	1990	1,245					313,000
TOTAL FIELD CROPS	1991	1,204,145					\$16,989,000
	1990	** 1,195,570					\$17,666,000

* Silage Corn, Dry Beans, Sudangrass, Winter Forage, Pearl Millet, Garbanzo Beans
 ** Revised



Implementing sustainable agriculture will require action by **all** participants in the food system.

VEGETABLE CROPS



Overall, vegetables continue to generate about half of the total crop value. Harvested acreage rebounded to near record levels. However, due to depressed crop prices, the value of vegetables dropped nearly 10 million dollars from 1990.

Crop	Year	Harvested Acreage	Per Acre	PRODUCTION		VALUE	
				Total	Unit	Per Unit	Total
Beans (Green)	1991	771	288	222,048	30#	\$6.89	\$1,530,000
	1990	789	344	271,416	30#	\$9.23	\$2,505,000
Bell Peppers	1991	1,000	836	836,000	30#	5.87	4,907,000
	1990	717	951	681,867	30#	8.21	5,598,000
Broccoli (Fresh)	1991	6,197	644	3,990,868	23#	5.19	20,713,000
	1990	3,712	676	2,509,312	23#	5.16	12,948,000
Broccoli (Frozen)	1991	753	6	4,518	Ton	383.00	1,730,000
	1990	1,863	5	9,315	Ton	360.00	3,353,000
Brussels Sprouts	1991	*					
	1990	42	805	33,810	25#	9.66	327,000
Cabbage	1991	1,340	780	1,045,200	45#	4.77	4,986,000
	1990	991	850	842,350	45#	5.07	4,271,000
Carrots	1991	4,244	720	3,055,680	50#	4.16	12,712,000
	1990	3,486	680	2,370,480	50#	4.83	11,449,000
Cauliflower	1991	2,202	615	1,354,230	25#	5.52	7,475,000
	1990	1,854	619	1,147,626	25#	5.48	6,289,000
Celery	1991	1,313	1139	1,495,507	60#	4.89	7,313,000
	1990	1,113	1091	1,214,283	60#	5.94	7,213,000
Oriental Vegetables	1991	1,399	900	1,259,100	80#	6.88	8,663,000
	1990	1,215	947	1,150,605	80#	7.09	8,158,000
Lettuce (Head)	1991	8,374	651	5,451,474	50#	6.13	33,418,000
	1990	9,108	731	6,657,948	50#	6.85	45,607,000
Lettuce (Leaf)	1991	1,738	902	1,567,676	50#	3.32	5,205,000
	1990	1,786	882	1,575,252	50#	4.47	7,041,000
Peas (Edible Pod)	1991	2,200	512	1,126,400	10#	7.52	8,471,000
	1990	3,500	491	1,718,500	10#	8.59	14,762,000
Spinach	1991	243	751	182,493	20#	4.30	785,000
Squash	1991	274	687	188,238	30#	3.92	738,000
	1990	144	809	116,496	30#	5.06	589,000
*Miscellaneous	1991	1,400					7,706,000
	1990	1,310					5,239,000
TOTAL VEGETABLE CROPS	1991	33,448					\$126,352,000
	1990	31,630					\$135,349,000

* Anise, Artichokes, Brussels Sprouts, Cilantro, Chili Peppers, Cucumber, Endive, Escarole, Garlic, Kale, Mushrooms, Onions, Parsley, Parsnips, Pumpkins, Radishes, Sweet Corn, Tomatoes, Tomatillos, Turnips, Watermelon.

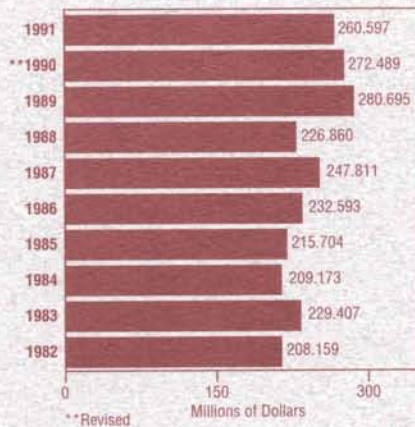
CROP & COMMODITY VALUE

10 Year Comparison

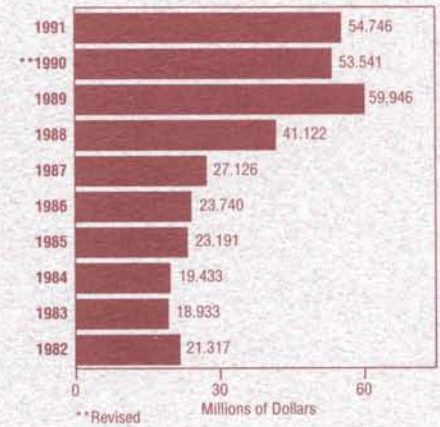
TOP 20 CROP & COMMODITY VALUES • 1991

1	Wine Grapes	\$34,172,000
2	Head Lettuce	33,481,000
3	Cattle & Calves	23,800,000
4	Fresh Broccoli	20,713,000
5	Carrots	12,712,000
6	Vegetable Transplants	8,750,000
7	Oriental Vegetables	8,663,000
8	Edible Pod Peas	8,471,000
9	Cut Greenhouse Flowers	8,197,000
10	Indoor Decorative Plants	7,884,000
11	Cauliflower	7,475,000
12	Celery	7,313,000
13	Strawberries	7,090,000
14	Cut Field Flowers	6,023,000
15	Leaf Lettuce	5,205,000
16	Rangeland/Dryland	5,200,000
17	Cabbage	4,986,000
18	Bell Peppers	4,907,000
19	Lemons	4,494,000
20	Grain Hay	4,446,000

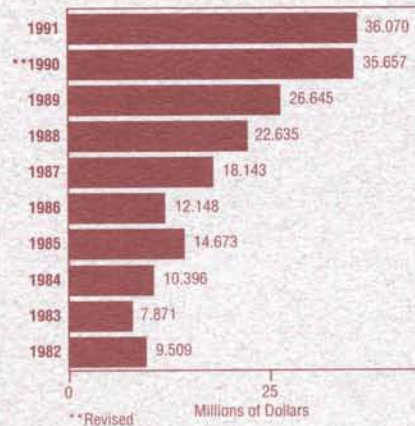
Total Valuations



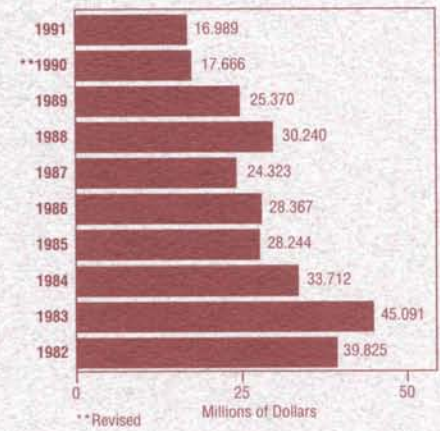
Fruit & Nut Crops



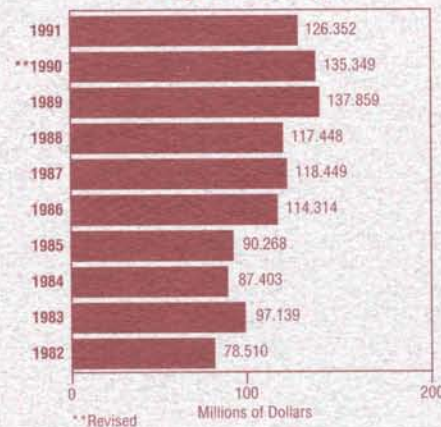
Nursery & Seed



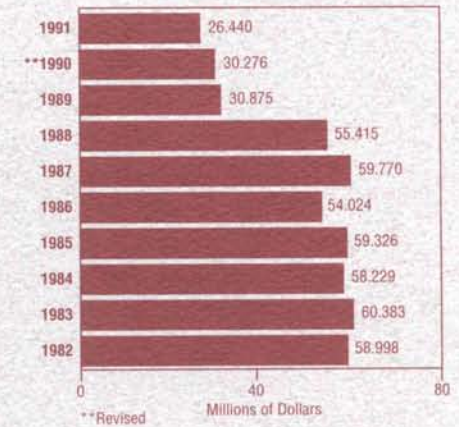
Field Crops



Vegetable Crops



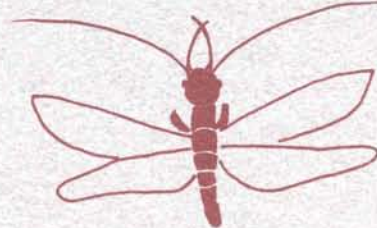
Animal Industry



TOTAL AGRICULTURAL ACREAGE

1991	1,257,421
1990	**1,247,730

**Revised



Department of Agriculture
Weights and Measures
2156 Sierra Way, Suite A
San Luis Obispo, CA 93401



Printed on Recycled Paper