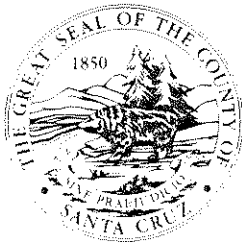




Santa Cruz County 1990 Crop Report



DAVID W. MOELLER
AGRICULTURAL COMMISSIONER
DIRECTOR, WEIGHTS & MEASURES

Henry J. Voss, Director
California Department of Food and Agriculture
and
The Honorable Board of Supervisors, Santa Cruz County

Fred Keeley, Chair and Supervisor of the 5th District
Jan Beautz, Supervisor of the 1st District
Robley Levy, Supervisor of the 2nd District
Gary Patton, Supervisor of the 3rd District
Ray Belgard, Supervisor of the 4th District

Dear Director Voss and Members of the Board:

I am pleased to submit the Santa Cruz County Agricultural Crop Report for 1990, in accordance with the provisions of Sections 2279 and 2272 of the California Food and Agricultural Code. For the first time, this report includes a brief summary of sustainable agricultural activities in Santa Cruz County.

The gross value of agricultural crops and products was \$196,754,000, an increase of 15% over 1989's revised production value of \$171,068,000. Once again, our agricultural industry has achieved a record high for gross production value, clearly establishing agriculture's preeminence in our County's economy.

Our premier crop, strawberries, again enjoyed a record year, where increased plantings and higher prices paid to growers offset a reduction in yields. Lettuce and nursery products showed strong increases, as well. Increases in raspberries, our 4th ranking crop, and bushberries reflect increased acreage devoted to these crops, a trend we anticipate will continue. Apples, as our 5th ranking agricultural commodity, still play a significant role.

The continuing drought, as well as the December 1990 freeze, certainly have adversely impacted agriculture over the long term; to what extent is unclear, but evidences of their influence will likely show in future reports.

It should be emphasized that these figures represent the gross value of production and are not meant to reflect net farm income.

My thanks and appreciation go to all growers, individuals and agencies who contributed information for this report as well as to Deputy Agricultural Commissioner/Sealer Richard Bergman of my staff who gathered the information for this report.

Respectfully submitted,

DAVID W. MOELLER
AGRICULTURAL COMMISSIONER/SEALER OF WEIGHTS AND MEASURES

Santa Cruz County Department of Agriculture/Weights and Measures
Personnel

AGRICULTURAL COMMISSIONER/DIRECTOR, WEIGHTS & MEASURES

David W. Moeller

DEPUTY AGRICULTURAL COMMISSIONERS/SEALERS

Richard Bergman

&

(vacant position)

SECRETARY

Veronica Rougeau

ACCOUNTING TECHNICIAN

Veronica Heath

CLERK II/RECEPTIONIST

Maria Prieto

AGRICULTURAL/WEIGHTS & MEASURES INSPECTOR III

John Bowman

Michael Morton

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Marilyn Perry

Mary Lou Nicoletti

Patrick Roof

Lisa LeCoup

AGRICULTURAL BIOLOGIST III

John Kovarik

Connie Jensen

WEIGHTS & MEASURES INVESTIGATOR

Marty Ryhanych

AGRICULTURAL/WEIGHTS & MEASURES INSPECTOR II

Jim Nee

AGRICULTURAL BIOLOGIST AIDES

Marianne Steeger

Ray Travers

Mark Sterrett

Patricia Johnson

Kimberly Doukas

SELECTED CROP TRENDS

CROP	ACRES			\$1000'S		
	1990	1989	1980	1990	1989	1980
BUSHBERRIES	249	190	270	3,075	1,613	736
RASPBERRIES	849	641	95	13,619	10,705	1,580
STRAWBERRIES	2,771	2,241	1,355	63,486	58,508	21,154
APPLES	4,650	4,800	6,970	12,304	9,272	15,429
AVOCADO	100	81	NA	75	89	NA
GRAPES, WINE	120	120	91	327	313	73
MISCELLANEOUS FRUIT	100	120	334	250	260	421
ARTICHOKES	544	580	NA	1,333	995	NA
BRUSSELS SPROUTS	1,712	1,538	2,885	6,191	5,373	7,372
CAULIFLOWER	1,064	568	925	4,469	1,896	2,333
CELERY	219	300	390	1,636	2,225	2,038
LETTUCE, HEAD	5,062	4,487	4,465	27,492	22,292	11,211
LETTUCE, LEAF	758	528	NA	3,248	2,779	NA
MISCELLANEOUS VEGETABLES	850	850	1,830	7,000	7,600	6,457
ROSES, HYBRID TEA	140	132	67	21,885	20,862	8,444
ROSES, SWEETHEART	21	19	13	2,375	2,565	1,336
CARNATIONS, STANDARD	24	32	27	2,045	2,903	2,061
CARNATIONS, MINIATURE	28	21	20	2,490	1,688	1,750
OTHER CUT FLOWERS	357	**300	220	7,348	3,400	NA
INDOOR POTTED PLANTS	75	75	12	3,957	3,500	NA
OUTDOOR NURSERY/TURF	200	205	280	2,600	3,000	9,840
CHRISTMAS TREES	300	320	4,445	400	400	690

SELECTED MILLION DOLLAR CROPS

STRAWBERRIES	63.5	CAULIFLOWER	4.5
LETTUCE, HEAD	27.5	LEAF LETTUCE	3.2
ROSES, HYBRID TEA	21.9	BUSH BERRIES	3.0
RASPBERRIES	13.6	NURSERY STOCK	2.6
APPLES	12.3	CARNATIONS, MINI	2.5
BRUSSELS SPROUTS	6.2	ROSES, SWEETHEART	2.4
		MILK, MARKET	1.2

(in \$1,000,000's, rounded to the nearest tenth)

- Notes:
1. Totals have been rounded-off for this report. This includes values for yield and price per unit which, if multiplied together, will not necessarily equate to total value figure given.
 2. Values marked (**) have been changed since publication of the 1989 Crop Report.

BERRY CROP VALUES/ACREAGES

CROP	YEAR	ACREAGE	TON/ACRE	TOTAL	\$/TON	TOTAL \$
BUSHBERRIES	90	249	6.50	1,618	1,900	3,075,000
	89	190	6.70	1,273	1,267	1,613,000
RASPBERRIES	90	894	5.92	5,294	2,573	13,619,000
	89	641	5.47	3,504	3,055	10,705,000
STRAWBERRIES	90	2,771	20.67	57,276	1,108	63,486,000
	89	2,241	28.76	64,451	914	58,908,000
TOTAL BERRIES	90	3,914				\$80,180,000
	89	3,072				\$71,226,000

TREE AND VINE CROP VALUES/ACREAGES

APPLES						
Fresh	90			10,741	206	2,217,000
	89			7,776	250	1,944,000
Process	90			22,459	130	2,919,000
	89			13,608	150	2,041,000
Juice	90			60,549	110	6,660,000
	89			39,528	120	4,743,000
Other	90			3,906	130	508,000
	89			3,888	140	544,000
TOTAL APPLES	90	4,650	21.00	97,650	126	\$12,304,000
	89	4,800	13.50	64,800	143	\$ 9,272,000
AVOCADOS	90	100	.50	50	1,500	75,000
	89	81	1.10	89	1,000	89,000
GRAPES, WINE	90	120	2.00	240	1,365	327,000
	89	120	1.80	216	1,450	313,000
MISC. TREE & VINE FRUIT*	90	100				250,000
	89	120				260,000
* includes apricots, peaches, plums, pears, persimmons, walnuts, feijoas, lemons and kiwis						
TOTAL TREE & VINE FRUIT	90	4,870				\$12,956,000
	89	5,120				\$ 9,934,000

Conversion factors: bushberries-8 lb crate; raspberries-6 lb crate; strawberries-12 lb crate; artichokes, cauliflower-23 lb carton; brussels sprouts-25 lb carton; celery, head lettuce-50 lb carton

VEGETABLE CROP VALUES/ACREAGES

CROP	YEAR	ACREAGE	TON/ACRE	TOTAL	\$/TON	TOTAL \$
ARTICHOKES	90	544	4.80	2,630	507	1,333,000
	89	580	4.40	2,552	390	995,000
BRUSSELS SPROUTS	90	1,712	8.61	14,740	420	6,191,000
	89	1,538	8.52	13,104	410	5,373,000
CAULIFLOWER	90	1,064	6.90	7,341	608	4,469,000
	89	568	6.20	3,527	537	1,896,000
CELERY	90	219	31.29	6,815	240	1,636,000
	89	300	28.09	8,426	264	2,225,000
HEAD LETTUCE	90	5,062	19.30	97,697	281	27,492,000
	89	4,477	19.30	86,020	259	22,292,000
LEAF LETTUCE	90	758	8.78	6,650	488	3,248,000
	89	528	9.77	5,156	534	2,779,000
MISCELLANEOUS VEGETABLES*	90	850				7,000,000
	89	850				7,600,000
*includes mushrooms, chives, cabbage, peas, corn, broccoli, squash, seed sprouts, beets, anise, tomatoes, snap beans, spinach and others						
TOTAL	90	10,209				\$51,369,000
VEGETABLES	89	8,841				**\$43,160,000

FIELD CROP (HAY & PASTURE) VALUES/ACREAGES

FIELD CROPS*	90		\$50,000
	89		\$100,000
*includes hay production and pasture rentals (estimated to total 10,000 acres)			

Conversion factors: bushberries-8 lb crate; raspberries-6 lb crate; strawberries-12 lb crate; artichokes, cauliflower-23 lb carton; brussels sprouts-25 lb carton; celery, head lettuce-50 lb carton

ANIMAL INDUSTRY VALUES

CROP	YEAR	TOTAL \$
APIARY	90	100,000
	89	150,000
CATTLE & CALVES	90	400,000
	89	400,000
MILK, MARKET	90	1,260,000
	89	1,305,000
MISCELLANEOUS*	90	700,000
	89	**700,000
*includes goat milk, poultry, eggs, rabbits, quail and quail eggs		
TOTAL ANIMAL INDUSTRY	90	\$ 2,460,000
	89	**\$ 2,555,000

NURSERY CROP VALUES/ACREAGES

CROP	YEAR	ACRES	YIELD	UNIT	\$/UNIT	TOTAL \$
ROSES, HYBRID TEA	90	140.60	81,484,555	BLOOMS	.27	21,885,000
	89	132.00	74,505,816		.28	20,862,000
ROSES, SWEETHEART	90	21.80	15,752,373	BLOOMS	.15	2,375,000
	89	18.90	15,691,309		.17	2,565,000
CARNATIONS, STANDARD	90	24.30	14,974,000	BLOOMS	.14	2,045,000
	89	31.90	20,737,000		.14	2,903,000
CARNATIONS, MINIATURE	90	27.80	1,978,910	BUNCHES	1.26	2,490,000
	89	21.45	1,520,867		1.11	1,688,000
OTHER CUT FLOWERS	90	357.00				7,348,000
	89	**300.00				3,400,000
TOTAL CUT FLOWERS, GREENS	90	571.50				\$36,143,000
	89	504.25				\$31,418,000
INDOOR POTTED PLANTS*	90	75.00				3,950,000
	89	75.00				3,500,000
*Includes orchids, poinsettias, geraniums, fuchsias, miniature roses and others						

NURSERY CROP VALUES/ACREAGES (CONTINUED)

CROP	YEAR	ACRES	YIELD	UNIT	\$/UNIT	TOTAL \$
OUTDOOR NURSERY STOCK*	90	200.00				2,600,000
	89	205.00				3,000,000
*Includes turfgrass, ground cover, container stock, iris and begonias						
CHRISTMAS TREES	90	300.00				400,000
	89	320.00				400,000
MISC. STOCK*	90	25.00				2,750,000
	89	25.00				2,750,000
*Includes forest nursery trees, vegetable transplants and berry plants						
TOTAL NURSERY	90	1,171.50				\$45,843,000
	89	**1129.25				\$41,068,000

SUMMARY OF PRODUCTION VALUES AND ACREAGES

CATEGORY	YEAR	TOTAL ACREAGE	TOTAL VALUE
BERRY CROPS	1990	3,914	\$ 80,180,000
	1989	3,072	71,226,000
TREE AND VINE CROPS	1990	4,870	12,956,000
	1989	5,120	9,934,000
VEGETABLE CROPS	1990	10,209	51,369,000
	1989	8,841	**43,160,000
FIELD CROPS	1990	10,000	50,000
	1989	10,000	100,000
ANIMAL INDUSTRY	1990		2,460,000
	1989		**2,555,000
NURSERY CROPS	1990	1,172	45,843,000
	1989	**1,129	41,068,000
TOTAL AGRICULTURE	1990		\$192,858,000
	1989		**\$168,043,000
LUMBER	1990		3,896,000
	1989		**3,025,000
TOTAL ALL AGRICULTURE AND LUMBER	1990	20,165	\$196,754,000
	1989	**18,162	**\$171,068,000

SUSTAINABLE AGRICULTURE SUMMARY

A Supplemental Report on Organic Farming, Biotechnology in Agriculture and Pest Management Developments and Programs in Santa Cruz County.

Organic Farming

From the early years of the University of California Santa Cruz (UCSC) farm, made famous by Allan Chadwick, UCSC has been a leader in alternative agriculture. The agroecology program has become an internationally recognized center of research on the application of ecological theory to agricultural practices. Cabrillo College, our local community college, has an active and enthusiastic program in horticulture and has produced many graduates in farming enterprises and landscape industries who are keenly aware of modern alternative practices. Santa Cruz County is also home to the state office of the California Certified Organic Farmers (CCOF) organization, the major driving force in the organic growing movement in the State.

Locally about 50 organic farms are recognized, with at least 20 in the process of transition from conventional (traditional) agriculture to organic agriculture. Total sales of organic products may exceed \$1,000,000 annually.

Integrated Pest Management (IPM)

The University of California Cooperative Extension has sponsored numerous projects to reduce the use of pesticides, water and fertilizer on Santa Cruz County crops. All major crops have benefited from these projects. The recent removal, however, of an IPM position from our County Extension office is the unfortunate result of State budget reductions. Plans are being made to offset this loss.

Considerable research has been sponsored by private companies and by industry groups that has resulted in reduced inputs of resources, one of the goals of sustainable agriculture.

Biocontrol is one aspect of IPM that has had most notable success in Santa Cruz County through the use of predatory mites on several locally grown crops, including Santa Cruz County's premier crop, strawberries.

Biotechnology

Several firms are using tissue culture technology to produce pathogen-free plants in order to reduce eventual economic and environmental costs which might result from future pesticide use on those plants.

Avermectins are a remarkable, new class of pesticides that are the result of a fermentation process of bacteria. Avermectins are used as miticides and insecticides. In certain specific applications, they are highly effective and replace several more toxic and less effective pesticides.

The County Agricultural Commissioner

The prevention of agricultural pest invasions into California is a task that has been performed for over 100 years at both the County and State levels. In Santa Cruz County, we have not trapped a non-sterile medfly since 1981 nor had a declared gypsy moth infestation since 1985. Over 20,000 shipments of incoming plant material or household goods were inspected by the Santa Cruz County Agricultural Commissioner's staff in 1990. Of this enormous number of shipments, 25 were detained for violations of California's quarantine regulations. The effective prevention of the introduction and spread of crop-threatening insect and disease pests minimizes or eliminates a future use of pesticides which would otherwise be necessary to eradicate a pest allowed to establish itself in California. This satisfies another goal of sustainable agriculture: reduce the input of materials, such as pesticides, beyond the amounts which have proven necessary to produce a continually abundant, economical and nutritious food supply.

SUSTAINABLE AGRICULTURE ACTIVITIES

COUNTY BIOLOGICAL CONTROL PROGRAMS

<u>Pest</u>	<u>Agent/Mechanism</u>	<u>Scope of Program</u>
Puncture Vine	Weevil	Initial Survey/Planning
Scotch Broom	Stem Boring Moth/Seed Weevil	Initial Survey/Planning
Italian Thistle (and others)	Seed Weevil	Initial Survey/Planning

PEST DETECTION

<u>Pest</u>	<u>Host/Site</u>	<u>Action</u>
Gypsy Moth (2)	Campground/Residence	Intensified Trapping
Purple Loosestrife (weed)	Wetlands	Mechanical Eradication Planned 8/91

PEST ERADICATION

None	None	None
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PEST EXCLUSION

Gypsy Moth	Household Goods	Eggs Removed/Destroyed
Quackgrass	Nursery Stock	Grass Rhizomes Removed

ORGANIC FARMING*

<u>Crop</u>	<u># of Farms</u>	<u>Acres</u>
Vegetables	15	500
Apples	10	150
Pears	3	20
Strawberries	1	15
Others	20+	unknown

*Note: Present levels of information provide for unconfirmed estimates only.