



SUTTER
COUNTY

CROP &
LIVESTOCK
REPORT
2017

A Celebration of Science and Service



University of California Cooperative Extension celebrates 100 years contributing to the economic development of the Sutter and Yuba Counties agricultural industries

This year, University of California Cooperative Extension (UCCE) is celebrating its 100th anniversary in Sutter and Yuba Counties. Part of the UC Division of Agriculture and Natural Resources (UCANR), UCCE is made up of advisors, staff and specialists who, like their counterparts in other states nationwide, bring university knowledge to farmers, families and the community to address local economic, agricultural, environmental, youth development and nutrition issues using science to solve problems.

The Division's roots are deeply embedded in the historic federal land-grant mission to conduct research relevant to the lives of Californians and to apply research to everyday problems through an intricate outreach system. You may know Cooperative Extension as the farm and 4-H advisors, Master Gardeners, or nutrition educators. When the UCCE programs were first established, each was located in offices in the respective counties. As the county governments who fund our operating budget recognized common issues/concerns, and the cost savings associated with consolidating operations, the two county UCCE programs merged in 1974. Since then, our programs in Sutter and Yuba Counties are delivered through a single office located in Yuba City.



Irrigating prune orchard, 1924

The creation of a county extension program required the formation/organization of the county farmers into a Farm Bureau that was composed of Farm Centers. Agricultural Extension as it was known then, carried out its work through Farm Centers. The first Sutter County farm advisor was hired March, 1918. Mr. J. E. Stiles made 396 farm calls on 178 farms, held 38 meetings and four pruning demonstrations, organized a boys and girls pig club (preceded the creation of 4-H), and wrote 39 articles for local papers in his first six months. His high level of activity set the bar for his successors.

For 100 years, UCCE has been conducting programs by highly trained county based academic staff employed by UC who provide non-formal adult and youth learning opportunities in their local communities. Solving industry problems involves a team approach including UCCE Advisors, Specialists and UC campus Faculty working with farmers and their organizations. Advisors conduct applied research and extend results and information through numerous grower, commodity, and industry educational meetings and workshops; informational newsletters, project reports and UCANR publications; cost of production studies; and on-farm problem solving calls.

A look at Sutter County Agriculture and UCCE contributions the first 40 years:

- 1919- Per Farm Advisor Sullivan, chief work in 1919 was establishment of an adequate system of roads- the Good Roads Bond Issue
- 1919- Began tree pruning demonstrations 'which ultimately revolutionized the practice'
- 1920- First annual Peach Growers contest held (to increase interest in peaches as a crop)
- 1923- Beans noted as 'quite important'
- 1925- Investigation into low almond yield, placed bees in almond orchards which increased yields by 158 percent in 1927
- 1925- Growing interest in cotton, experiment run- abandoned as failure in 1926
- 1926- Growing interest in walnuts noted, again in 1927



Soil testing, c. late 1950's - early 1960's

'During the Depression years, Congress delegated to the Extension Service the arduous job of administering control programs on wheat, hogs, rice and sugar beets; the active participation of the cling peach marketing agreement; the organization and establishment of the Production Credit Association and the National Farm Loan Association leaving little time for the education phases of extension work.'

- 1931- Agricultural Extension economic gain in Sutter County (1925-1931) valued at 3 million by Giannini Foundation
- 1937- First Home Demonstration Agent hired
- 1937- Effort to get back to educational phases of Extension work

'World War II was responsible for adding heavy burdens to the already heavy load of the Extension Service. Among these were the organization of 11 units of the State Militia, and the placement of farm labor. The organization of a large number of rural fire companies, to guard against war-time attack or sabotage, was another war-time job imposed upon the office.'

- 1950- New crop Safflower 100 acres
- 1952- Yuba-Sutter Dairy Herd Improvement Association formed
- 1952- Rice is biggest crop at approx. 65,000 acres approx. 13 million gross income
- 1957- Now nation's #1 county in Safflower

UCCE/UC agricultural contribution highlights the last 60 years resulting in economic benefit to farmers and reduced impacts on the environment:

Orchard crops

- Integrated pest management (IPM) - insect/disease models for management; mite monitoring
- Evapotranspiration (ET) models; best irrigation management practices; microirrigation
- Orchard nutrition - identifying and correcting nutrient deficiencies and toxicities

Walnut

- UC walnut varieties comprise about 85 percent of the California walnut industry
- Developing/testing nematode and disease tolerant/resistant rootstocks
- Identifying causes and methods to minimize nut quality losses, e.g. early harvest
- Training systems and canopy management that reduce labor needs and increase yield
- Implementing codling moth mating disruption products that reduce pesticide use
- Cause and correction of pollination problems

Prune

- Shaker fruit thinning to increase fruit size
- Irrigation to manage prune end cracking
- Correcting potassium (K) deficiency dieback using foliar and soil applied K



Cover crop demonstration, 1939

Peach

- Implementing Oriental fruit moth mating disruption products that reduce pesticide use
- Developing objective colorimeter-based measurements for assessing fruit maturity

Almond

- Pollinizer selection to improve Nonpareil variety yield
- Bees and stocking rates for best yield
- Frost protection/damage thresholds with irrigation water
- Planting density/light and yield potential (production)

Kiwifruit

- Developing maturity standards and postharvest disease management



Tomato harvester, c. 1960's

Beans

- Developed many important bean varieties ranging from baby lima to garbanzo

Wheat

- UC released first stripe rust resistant wheat variety (Patwin) in 2008 following a devastating epidemic, which reduced the need for fungicide application

Alfalfa

- Instrumental in developing/promoting a standardized alfalfa hay quality evaluation system

Articles and photographs by UC Cooperative Extension, Sutter-Yuba Counties except where noted on photographs. Historical information assembled by Sutter County Museum.



Photo by Leslie Morris, CA Rice Commission

100 years of Rice Extension in Sutter and Yuba Counties

Rice is one of the largest acreage and value crops in both Sutter and Yuba Counties. First plantings were made in 1913, with 395 acres in the Sutter Basin and 40 acres in District 10. As acreage quickly expanded, numerous production and environmental issues emerged requiring research based solutions coupled with on-farm information delivery.

A unique aspect of the California rice industry and one of its great strengths is its team approach to solving industry-wide problems. The team includes county-based UCCE Rice Advisors, campus Specialists and Faculty working with the grower-owned California Cooperative Rice Experiment Station, the California Rice Research Board and the California Rice Commission. Rice Field Day, held annually at the Rice Experiment Station since 1912, is the best-attended rice extension meeting in California, and is a joint effort with the station staff and the UCCE researchers who conduct extensive research programs there, particularly on weed management and other pest problems.



Whitney Brim-Deforest, UCCE Rice Advisor

Significant contributions by UCCE Rice Advisors:

- The role of irrigation water in weed/herbicide interactions, rice growth, preventing panicle sterility, and crop water use and efficiency; management of herbicide and salinity effects on water quality
- Improving fertilizer use efficiency; nutrient deficiency diagnosis and correction
- Improving rice residue burning; finding alternatives to residue burning; measuring methane production from winter flooding; crop nutrient contributions from straw incorporation
- On-farm testing of advanced rice lines to support release of new California varieties
- Diagnosis and prevention of endemic and exotic pests including weedy rice, blast disease, and armyworm

One of the rice industries' greatest contributions to the California environment has been because of the shift from fall burning of rice straw to winter flooding of rice fields to aid in straw decomposition. The winter flooded fields provide habitat for migrating winter waterfowl and are now part of the Pacific Flyway.

TABLE OF CONTENTS

1. A Celebration of Science and Service
2. 100 Years of Rice Extension
3. Mission Statement
4. Agricultural Commissioner's Letter
5. Fruit & Nut Crops
6. Nursery Products
6. The Chandler Walnut Story
7. Field Crops
8. Seed Crops
9. Apiary Products
9. Livestock
10. Vegetable Crops
10. Organic Farming
11. Ten Leading Crops
12. Gross Production Value
13. Exports by Country
14. Department Statistics - Sustainable
15. Department Statistics - General
17. Staff Retirements
18. Staff

MISSION STATEMENT

Our mission is to serve the public's interest by ensuring equity in the marketplace, promoting and protecting agriculture, assuring environmental quality and protecting the health, safety and welfare of Sutter County's citizens.

We fulfill our mission through the following programs: Pest Exclusion, Pesticide Use Enforcement, Pest Detection, Fruit and Vegetable Standardization, Egg Quality Control, Pest Management, Nursery Inspection, Pest Eradication, Seed Inspection, Weights and Measures Enforcement, Predatory Animal Control and other non-regulatory and special services programs.



OFFICE OF THE
AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS & MEASURES

LISA D. HERBERT
Agricultural Commissioner
Sealer of Weights and Measures

August 2018

Karen Ross, Secretary
California Department of Food and Agriculture
and
The Honorable Board of Supervisors of Sutter County
Dan Flores, District 2, Chairman
Ron Sullenger, District 1
Larry Munger, District 3
Jim Whiteaker, District 4
Mat Conant, District 5

I am pleased to present the 2017 Crop and Livestock Report for Sutter County. The report is prepared pursuant to Section 2279 of the California Food and Agricultural Code and is a summary representing estimated acreage, yield and gross values. The gross value of Sutter County agricultural production for 2017 was \$583,996,000. This is an increase of \$69,624,000 or 13.5% above the 2016 total value.

Rice remains the top-ranking crop in 2017 with slight increase in yield and price to a total value of \$151,710,000. Historic wet weather in late winter and early spring caused a 28.8% decrease in rice acreage due to prevented planting. In second place, Walnuts total value increased nearly 10% due to higher acreage and price, rising to \$130,414,000. After a devastating crop loss in 2016, Prunes rebounded to third from seventh with an increase in total value of 113% to \$52,372,000. Nursery products remained fourth with an increase in total value to \$47,349,000 or 32.8%. Processing peaches ranked fifth with decreases in acreage, yield and price with total value of \$43,719,000. Almonds increased nearly 30% in acreage yet remained in sixth due to a drop in price as total value rose to \$36,278,000.

This issue highlights the University of California Cooperative Extension (UCCE) celebration of 100 years contributing to the economic development of the agricultural industries of Sutter and Yuba Counties. Thank you to Janine Hasey, UCCE Tree Crops Farm Advisor and County Director and Jessica Hougen, Museum Director/Curator, Community Memorial Museum of Sutter County for their contributions and use of photographs.

I would like to express my sincere appreciation for the cooperation of all the growers, organizations and individuals who provided us the data that allows this report to be compiled. Thank you to all my staff, especially Nick Oliver for compiling and analyzing the data and Allyson Wadkins for the graphic design. This report represents gross values only and does not reflect net profits or loss to the producers.

To learn more about the Agricultural Commissioner's Office and the services we provide including crop reports dating back to 1940, please visit our website at <http://www.co.sutter.ca.us/doc/government/depts/ag/aghome>.

Respectfully submitted,

Lisa D. Herbert
Agricultural Commissioner

FRUIT & NUT CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Almonds, Meats	2017	12,265	0.63	7,727	Ton	\$4,695	\$36,278,000
	2016	9,445	0.60	5,667	Ton	\$5,547	\$31,435,000
Almonds, Hulls	2017			9,659	Ton	100	966,000
	2016			7,085	Ton	100	709,000
Olives	2017	1,168	3.95	4,614	Ton	505	2,330,000
	2016	883	2.59	2,287	Ton	490	1,121,000
Peaches, Clingstone	2017	6,603	14.52	95,876	Ton	456	43,719,000
	2016	7,252	16.05	116,395	Ton	488	56,801,000
Persimmons	2017	172	8.14	1,400	Ton	764	1,070,000
	2016	173	8.93	1,545	Ton	867	1,340,000
Prunes, Dried	2017	12,273	2.24	27,492	Ton	1,905	52,372,000
	2016	14,256	0.86	12,260	Ton	2,004	24,569,000
Walnuts, English ¹	2017	30,700	1.80	55,260	Ton	2,360	130,414,000
	2016	28,786	2.35	67,647	Ton	1,755	118,720,000
Miscellaneous ^{2, 3}	2017	669		2,977	Ton		3,739,000
	2016	663		2,814	Ton		4,447,000
Orchard By-Products	2017				Ton		5,500,000
	2016				Ton		4,752,000
TOTAL ¹	2017	63,850					\$276,388,000
	2016	61,458					\$243,894,000

CROP	BEARING ACRES		NON-BEARING ACRES	
	2017	2016	2017	2016
Almonds	12,265	9,445	4,015	1,534
Olives	1,168	883	0	0
Peaches, Clingstone	6,603	7,252	2,120	1,181
Persimmons	172	173	11	17
Prunes, Dried	12,273	14,256	2,327	2,244
Walnuts, English	30,700	28,786	5,499	6,396
Miscellaneous ^{2, 3}	651	664	53	58
TOTAL	63,832	61,459	14,025	11,430

¹ 2016 Total Value revised

² Includes Apples, Apricots, Berries (Blackberries, Boysenberries & Raspberries), Cherries, Chestnuts, Citrus (Grapefruit, Lemons, Limes, Mandarines, Oranges, Tangerines), Feijoa, Figs, Grapes, Jujubes (Chinese Date), Nectarines, Peaches (Frestone), Pecans, Pears, Pistachio Nuts, Plums, Pomegranates, Strawberries, Walnuts (Black) and other miscellaneous fruit and nut crops of a limited number of growers/processors in Sutter County.

³ Kiwifruit included in Miscellaneous Fruit & Nut due to insufficient production and value data.



ITEM	YEAR	FIELD ACRES	QUANTITY SOLD	TOTAL
Trees and Vines (Fruit and Nut, Bareroot and Potted)	2017	228	12,972,000	\$46,732,000
	2016	195	9,092,000	\$35,196,000
Miscellaneous ¹	2017	7	58,000	617,000
	2016	7	43,000	455,000
TOTAL	2017	235	13,030,000	\$47,349,000
	2016	202	9,135,000	\$35,651,000

¹ Includes Ornamental Trees, Shrubs and other Nursery Stock.

The Chandler Walnut Story

Sutter and Yuba Counties, University of California (UC), and UC Cooperative Extension (UCCE) are closely linked to the Chandler walnut variety that accounts for over half of the California walnut acreage.

From 1951 to 1965, the UC Davis walnut breeding program was directed by Gene Serr with Harold Forde assisting him as Principal Laboratory Technician. After graduating from UC Berkeley in plant physiology, Gene Serr started his career serving as an “itinerant” farm advisor for UC Agricultural Extension in Sutter County from 1922-1930. Harold Forde lived in Marysville, California on a farm from two years old and attended Marysville High School and Yuba College before graduating from UC Davis in pomology in 1938. Gene and Harold worked closely together making crosses for new walnut selections and releasing walnut varieties commonly planted today. The Chandler variety cross was made in 1963, then patented and released in 1979.

With the new Chandler variety and other UC varieties now released, the baton was passed to the UCCE walnut advisors. The new local Sutter-Yuba Counties advisor along with her colleagues conducted numerous field trials using these new varieties and extended the research results facilitating the widespread adoption of this high-quality walnut variety created by Gene and Harold who had early roots in Sutter and Yuba Counties.

Walnut Field Meeting, 2018 (Photo credit - Melissa Steidlmayer)



Gene Serr, UCCE Sutter County Farm Advisor, 1924



Harold Forde

The Chandler walnut cross made 55 years ago at UC contributes over 50 percent of the value of walnuts to the billion dollars plus California walnut industry. In Sutter and Yuba Counties, the combined value exceeds \$102 million for 2017.

Breeding and selecting new walnut varieties and rootstocks continue at UC Davis. Working closely with UCCE walnut advisors and other UC and USDA collaborators, we are looking forward to the next 100 years of new releases.

The Chandler walnut story is just one example of UCCE's long-term commitment to grow the local economy.

FIELD CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Bean, Dried, Edible ^{1, 2}	2017	5,688	0.92	5,233	Ton	\$916	\$4,793,000
	2016	6,595	0.92	6,077	Ton	\$915	\$5,564,000
Corn, Field Grain	2017	15,016	5.81	87,243	Ton	148	12,912,000
	2016	8,309	7.09	58,911	Ton	177	10,427,000
Hay, Alfalfa	2017	4,135	4.10	16,954	Ton	196	3,323,000
	2016	5,713	6.42	36,677	Ton	160	5,868,000
Hay, Grain ²	2017	4,094	3.08	12,610	Ton	154	1,942,000
	2016	4,642	3.36	15,588	Ton	81	1,260,000
Pasture, Irrigated	2017	9,500			Acre	138	1,311,000
	2016	10,000			Acre	140	1,400,000
Pasture, Range Dry ³	2017	63,000			Acre	21	1,323,000
	2016	63,250			Acre	20	1,265,000
Rice ⁴	2017	80,531	4.86	391,381	Ton	377	147,551,000
	2016	113,084	4.37	494,177	Ton	247	122,061,000
Safflower	2017	3,528	1.22	4,304	Ton	310	1,334,000
	2016	3,613	1.08	3,902	Ton	427	1,666,000
Wheat, Grain	2017	4,814	1.46	7,028	Ton	155	1,089,000
	2016	5,654	2.71	15,322	Ton	169	2,589,000
Miscellaneous ^{5,6}	2017	10,843		14,256	Ton		7,860,000
	2016	11,390		14,834	Ton		6,865,000
Field Crop By-Products	2017			77,913	Ton		3,662,000
	2016			68,849	Ton		3,236,000
TOTAL	2017	201,149					\$187,100,000
	2016	232,250					\$162,201,000

¹ Includes all varieties of edible Dried Bean, including Lima, Blackeye, Garbanzo, Light and Dark Red Kidney Bean, and other miscellaneous beans of a limited number of growers/processors in Sutter County.

² Total Production and Total Value may not calculate due to rounding of data.

³ The valuation is not an animal production figure but a land value (rental equivalent).

⁴ Includes USDA Support Price.

⁵ Includes Barley, Corn (Silage), Cotton, Grass Hay, Oats (Silage), Popcorn, Triticale, Vetch, Sorghum and other miscellaneous field crops of a limited number of growers/processors in Sutter County.

⁶ Wild rice moved to Miscellaneous field crops due to insufficient production and value data.

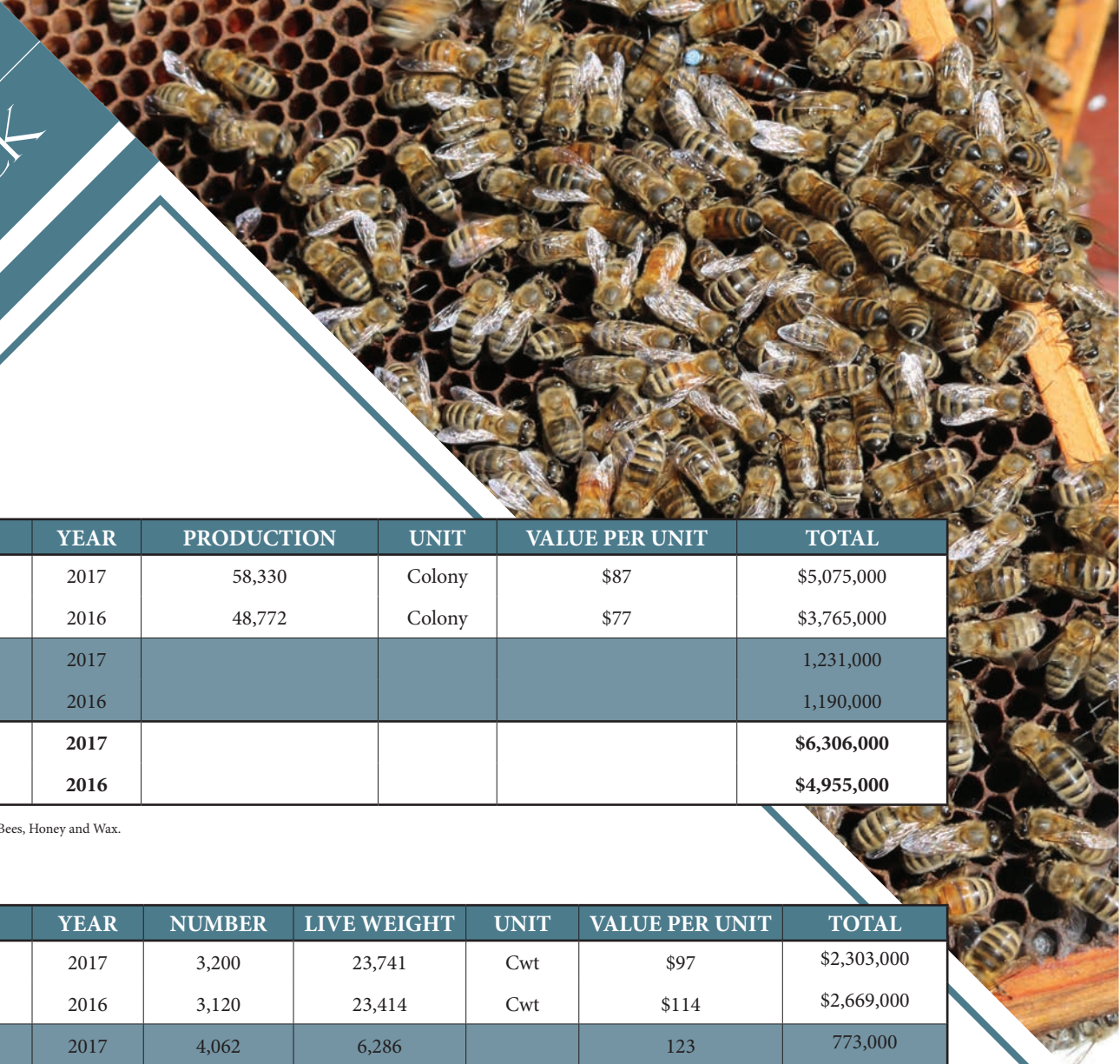
SEED CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Cucumbers ¹	2017	641	218	140,000	Lb	\$14.32	\$2,005,000
	2016	423	164	69,000	Lb	\$16.42	\$1,133,000
Pumpkins & Squash	2017	341	523	178,000	Lb	5.61	999,000
	2016	294	551	162,000	Lb	4.75	770,000
Rice	2017	2,887	8,003	23,105,000	Lb	0.18	4,159,000
	2016	2,831	8,684	24,584,000	Lb	0.22	5,408,000
Safflower	2017	862	1,535	1,323,000	Lb	0.73	966,000
	2016	662	2,160	1,430,000	Lb	0.21	300,000
Sunflower	2017	10,568	847	8,951,000	Lb	1.24	11,099,000
	2016	7,536	538	4,054,000	Lb	1.47	5,959,000
Watermelons	2017	852	163	139,000	Lb	52.47	7,293,000
	2016	812	320	260,000	Lb	14.42	3,749,000
Wheat	2017	210	4,582	962,000	Lb	0.08	77,000
	2016	893	5,000	4,465,000	Lb	0.12	536,000
Miscellaneous ²	2017	328		317,000	Lb		1,037,000
	2016	643		374,000	Lb		1,771,000
TOTAL ¹	2017	16,689					\$27,635,000
	2016	14,094					\$19,626,000

¹ Includes Alfalfa, Arugula, Basil, Fresh Beans, Dried Beans (Blackeye, Cowpea, Cranberry, Lima, Dark Red Kidney, Light Red Kidney), Broccoli, Cabbage, Cantaloupe, Carrots, Cauliflower, Coriander, Gourds, Kale, Lettuce, Onion, Peppers, Mixed Melons, Okra, Radish, Sugar Peas, Swiss Chard, Tomato, Tomatillo, Triticale, Wild Rice and other miscellaneous seed crops of a limited growers/processors in Sutter County.

² 2016 Total Value revised

APIARY PRODUCTS LIVESTOCK



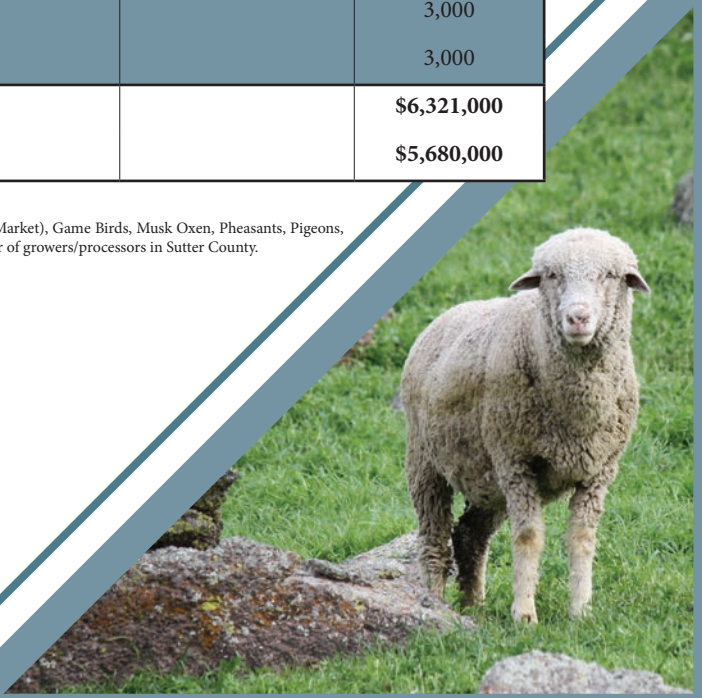
ITEM	YEAR	PRODUCTION	UNIT	VALUE PER UNIT	TOTAL
Pollination	2017	58,330	Colony	\$87	\$5,075,000
	2016	48,772	Colony	\$77	\$3,765,000
Miscellaneous ¹	2017				1,231,000
	2016				1,190,000
TOTAL	2017				\$6,306,000
	2016				\$4,955,000

¹ Includes Package Bees, Queen Bees, Honey and Wax.

ITEM	YEAR	NUMBER	LIVE WEIGHT	UNIT	VALUE PER UNIT	TOTAL
Cattle & Calves ¹	2017	3,200	23,741	Cwt	\$97	\$2,303,000
	2016	3,120	23,414	Cwt	\$114	\$2,669,000
Sheep & Lambs	2017	4,062	6,286		123	773,000
	2016	4,114	6,514		114	743,000
Miscellaneous ²	2017					3,242,000
	2016					2,265,000
Livestock By-Products	2017					3,000
	2016					3,000
TOTAL	2017					\$6,321,000
	2016					\$5,680,000

¹ Includes USDA Support Price.

² Includes Alpaca & Angora Fur, Aquaculture, Chickens, Chicken Eggs, Ducks, Fish Bait, Geese, Goats, Hogs, Milk (Market), Game Birds, Musk Oxen, Pheasants, Pigeons, Rabbits, Rabbit Hides, Turkeys, Water Buffalo, Wool and other miscellaneous livestock and poultry of a limited number of growers/processors in Sutter County.



VEGETABLE CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Melons, Honeydew	2017	811	10.89	8,832	Ton	\$400	\$3,533,000
	2016	506	14.52	7,347	Ton	\$500	\$3,674,000
Tomatoes, Processing	2017	8,570	41.85	358,655	Ton	70	25,106,000
	2016	9,718	49.18	477,931	Ton	73	34,889,000
Miscellaneous ¹	2017	956		10,340	Ton		4,258,000
	2016	927		9,372	Ton		3,802,000
TOTAL	2017	10,337					\$32,897,000
	2016	11,151					\$42,365,000

¹ Includes Artichoke, Asparagus, Basil, Beets, Bitter Melons, Bok Choy, Broccoli, Brussels Sprouts, Cabbage, Cantaloupe, Carrots, Cauliflower, Celery, Chard, Cilantro, Corn (sweet), Cucumbers, Eggplant, Garlic, Gourds, Green Beans, Herbs, Kale, Kohlrabi, Leeks, Lettuce, Melons (Mixed), Mustard, Okra, Onions, Parsnips, Peas, Peppers, Potatoes, Pumpkins, Radishes, Rhubarb, Rutabagas, Shallots, Spinach, Sprouts, Squash, Sweet Potatoes, Tomatillos, Tomatoes (Fresh), Turnips, Water-melons, Winter Squash, Zucchini and other miscellaneous vegetables of a limited number of growers/processors in Sutter County.

ORGANIC FARMING

California is the only state with its own organic program. Organic agriculture in California accounts for more than twenty percent of all organic production in the nation.

Forty-one farms, totaling approximately 17,043 acres of crop land were registered as organic in Sutter County in 2017. Utilizing organic principles defined in the Federal Organic Foods Production Act of 1990, and the California Organic Product Act of 2003, these farms produce a wide array of commodities such as almonds, stone fruit, beans, herbs, corn, popcorn, miscellaneous vegetables, apples, grapes, pears, pomegranates, melons, squash, oats, peas, prunes, rice, seed crops, tomatoes, walnuts and wheat. The total estimated value of organic production in Sutter County in 2017 was \$27,050,422. In comparison, 2016 had 15,220 production acres with an estimated value of \$26,272,857.

Sutter County Agricultural Biologists assist organic growers with their registration and cost-share applications. They also inspect registered organic products at point of production, certified farmers' markets and retail locations. Our biologists also obtained five random produce samples from our producers and retail locations for submission to CDFA's Center for Analytical Chemistry for assuring organic production standards in 2017.

TEN LEADING CROPS

CROP	2017	CROP	2016
RICE ¹	\$151,710,000	RICE ¹	\$127,469,000
WALNUTS	\$130,414,000	WALNUTS ²	\$118,720,000
PRUNES, DRIED	\$52,372,000	PEACHES, PROCESSING	\$56,801,000
NURSERY PRODUCTS	\$47,349,000	NURSERY PRODUCTS	\$35,651,000
PEACHES, PROCESSING	\$43,719,000	TOMATOES, PROCESSING	\$34,889,000
ALMONDS	\$36,278,000	ALMONDS	\$31,435,000
TOMATOES, PROCESSING	\$25,106,000	PRUNES, DRIED	\$24,569,000
CORN, FIELD	\$12,912,000	CORN, FIELD	\$10,427,000
SUNFLOWER, SEED	\$11,099,000	SUNFLOWER, SEED	\$5,959,000
WATERMELON, SEED	\$7,293,000	ALFALFA	\$5,868,000

¹ Includes Seed, does not include Wild Rice.

² 2016 Total Value revised

GROSS PRODUCTION VALUE

CATEGORIES	2017	2016
FRUIT & NUT CROPS ¹	\$276,388,000	\$243,894,000
FIELD CROPS	\$187,100,000	\$162,201,000
SEED CROPS ¹	\$27,635,000	\$19,626,000
VEGETABLE CROPS	\$32,897,000	\$42,365,000
NURSERY PRODUCTS	\$47,349,000	\$35,651,000
LIVESTOCK PRODUCTS	\$6,321,000	\$5,680,000
APIARY PRODUCTS	\$6,306,000	\$4,955,000
TOTAL ¹	\$583,996,000	\$514,372,000

¹ 2016 Total Value revised

YEAR	VALUE	YEAR	VALUE	YEAR	VALUE
1958	\$38,786,000	1978	\$220,502,000	1998	\$268,323,100
1959	50,707,000	1979	258,666,900	1999	347,939,000
1960	50,536,000	1980	299,014,700	2000	340,176,000
1961	55,585,000	1981	316,465,900	2001	264,673,000
1962	57,322,000	1982	247,784,100	2002	291,061,100
1963	55,155,000	1983	205,335,300	2003	307,322,300
1964	66,740,000	1984	262,285,500	2004	299,219,300
1965	64,564,000	1985	255,449,600	2005	305,190,190
1966	71,627,000	1986	229,364,800	2006	358,845,200
1967	69,313,000	1987	216,183,600	2007	377,940,800
1968	80,275,000	1988	201,345,800	2008	498,195,200
1969	74,006,000	1989	243,940,200	2009	475,691,100
1970	77,238,000	1990	217,400,000	2010	521,640,570
1971	82,209,000	1991	268,941,900	2011	518,198,460
1972	95,118,000	1992	285,622,700	2012	528,253,000
1973	159,204,000	1993	292,108,300	2013	597,530,000
1974	179,719,000	1994	340,171,300	2014	726,066,000
1975	187,517,000	1995	330,170,500	2015	538,147,000
1976	178,554,000	1996	302,706,400	2016 ¹	514,372,000
1977	200,878,000	1997	277,169,700	2017	583,996,000

¹ 2016 Total Value revised

EXPORTS BY COUNTRY

- | | | |
|--------------------|-----------------------|----------------|
| Denmark | Kazakhstan | |
| Dominican Republic | Kenya | |
| Ecuador | Kuwait | |
| Egypt | Lebanon | |
| El Salvador | Lithuania | |
| Fiji | Malaysia | |
| France | Mali | Saudi Arabia |
| Germany | Mauritius | Senegal |
| Greece | Mexico | Singapore |
| Grenada | Morocco | South Africa |
| Guatemala | Nepal | South Korea |
| Guyana | Netherlands | Spain |
| Haiti | New Zealand | Sri Lanka |
| Honduras | Nicaragua | Sudan |
| India | Pakistan | Suriname |
| Indonesia | Panama | Sweden |
| Iran | Paraguay | Switzerland |
| Iraq | Peru | Taiwan |
| Israel | Philippines | Thailand |
| Italy | Poland | Tunisia |
| Jamaica | Portugal | Turkey |
| Japan | Romania | Uganda |
| Jordan | Saint Kitts and Nevis | Ukraine |
| | | UAE |
| | | United Kingdom |
| | | Uruguay |
| | | Uzbekistan |
| | | Venezuela |
| | | Viet Nam |
| | | Yemen |



Pest Exclusion

This program provides the first line of defense for California agriculture and the environment against the invasion of exotic pests. Inspections provide protection from the introduction of plant, animal, insect and disease pests that may be introduced into the state through the movement of legal or illegal trade. This program also involves inspections of plant material being delivered to other states and countries and the issuance of certificates documenting compliance with their entry requirements.

A total of 333 premise visits were conducted in 2017. A total of 1,999 shipments of plant material were inspected during these visits. Inspections occurred at express carriers, nurseries and other farms. There was one rejection of plant material issued. Rejected plant material may be returned to the shipper, reconditioned and released or destroyed. To assist our industry, we issued 1,968 federal phytosanitary certificates for international shipments and 22 state phytosanitary certificates for shipments to other states.

Total Hours Expended 2017: 5,564

Pest Detection

This program provides the second line of defense against exotic pests through the early detection of new introductions before they become widely established. Through early detection the likelihood of these pests becoming established in the state is lessened and the cost and environmental impact of eradication is minimized.

There were 662 traps placed for the detection of exotic insect pests including Mediterranean, Oriental and melon fruit flies, gypsy moth, Japanese beetle, European pine shoot moth, khapra beetle, vine mealybug, European grapevine moth, light brown apple moth and Asian citrus psyllid. Over the course of the season a cumulative total of 6,532 servicings were performed.

Total Hours Expended 2017: 1,718

Pest Management

The County Agricultural Commissioner is charged with the responsibility of managing nuisance pests of agriculture and human health. Many of these pests are introduced species that have become established despite our best pest exclusion efforts. If promising, programs are established to distribute biological agents for troublesome pests.

To prevent the spread of glassy-winged sharpshooter (GWSS), Sutter County inspected 143 shipments of nursery stock arriving from infested areas in California. There were zero shipments of plant material rejected for the presence of GWSS egg masses or other life stages. There were 123 traps placed in nurseries and urban areas for the detection of GWSS, which were serviced a total of 1,230 times.

The Biological Control program utilizes natural enemies to suppress populations of pests to economically and environmentally acceptable levels. Following establishment, the agents are self-sustaining, reducing the need for chemical controls. A number of biological control agents are of general distribution or locally established, including agents for puncturevine (*Tribulus terrestris*) and yellow starthistle (*Centaurea solstitialis*). The puncturevine agents include puncturevine seed weevil (*Microlarinus laerynii*) and puncturevine stem weevil (*M. lypriformis*) and are distributed countywide. There are six yellow starthistle agents present in Sutter County. Additionally, the lerp psyllid wasp (*Psyllephagus bliteus*) is present, which acts as a biocontrol for the redgum lerp psyllid (*Glycaspis brimblecombei*), a pest of eucalyptus.

The Sutter County Agricultural Commissioner's Office facilitates the local management of vertebrate pests by selling vertebrate baits to growers with restricted materials permits. In 2017, a total of 1,100 pounds of anticoagulant bait was sold.

Total Hours Expended 2017: 446

Nursery Inspection

Through this program inspections are performed at the growing, propagation, production and sales sites to ensure cleanliness from pests, varietal trueness and stock vigor prior to consumer sales. In 2017, 157 hours were spent performing inspections at 124 locations, consisting of 448 acres.

Total Hours Expended 2017: 539



Measurement Standards

County Weights and Measures officials ensure the accuracy of commercial weighing and measuring devices; verify the quantity of both bulk and packaged commodities; and enforce the quality, advertising and labeling standards for most petroleum products.

Total Hours Expended 2017: 2,716

Pesticide Use Enforcement

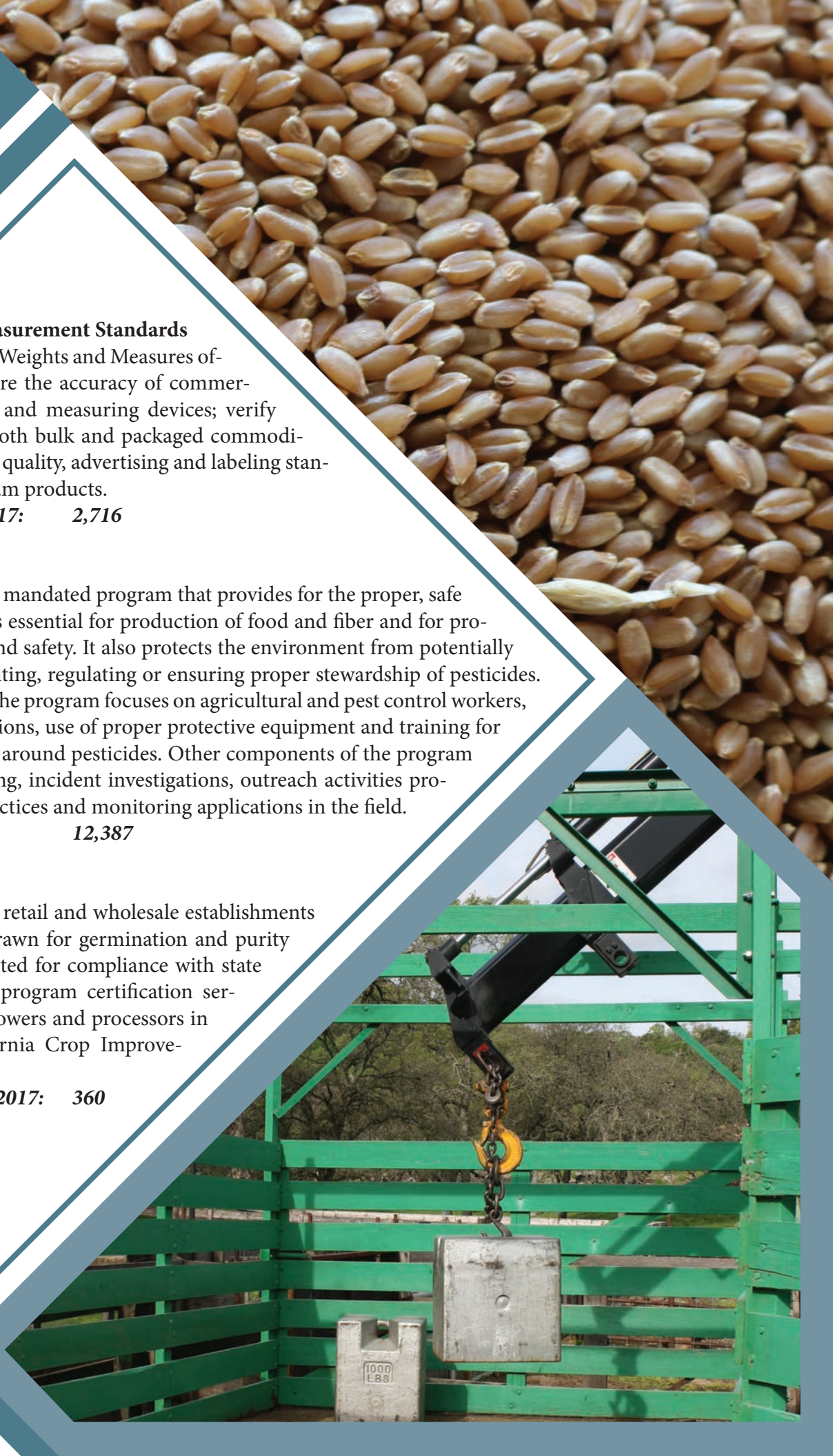
This is a complex legislatively mandated program that provides for the proper, safe and effective use of pesticides essential for production of food and fiber and for protection of the public health and safety. It also protects the environment from potentially harmful pesticides by prohibiting, regulating or ensuring proper stewardship of pesticides. An important component of the program focuses on agricultural and pest control workers, ensuring safe working conditions, use of proper protective equipment and training for employees who work with or around pesticides. Other components of the program include pesticide use reporting, incident investigations, outreach activities promoting best management practices and monitoring applications in the field.

Total Hours Expended 2017: 12,387

Seed Certification

Inspections are performed at retail and wholesale establishments that sell seed. Samples are drawn for germination and purity testing and labeling is inspected for compliance with state requirements. Through this program certification services are also available for growers and processors in cooperation with the California Crop Improvement Association.

Total Hours Expended 2017: 360



Fruit, Nut and Vegetable Standardization

This program ensures compliance with California's minimum standards regarding quality and marketing of all produce commercially grown and/or marketed in the state. Regulation of three certified farmers' markets and 32 certified producers as well as Organic Program law enforcement are part of a program that provides for local protection to growers, marketers and consumers.

Total Hours Expended 2017: 984

Apiary Inspection

This program emphasizes the registration and site location of honeybee colonies in the county. At the request of beekeepers or growers, the County Agricultural Commissioner inspects colonies for strength and health to ensure effective pollination.

Total Hours Expended 2017: 46

Crop Statistics

As required by the California Food and Agricultural Code, the gross production and value of the county's commodities are compiled and recorded in the annual crop report. This valuable information helps associated businesses while promoting the production and prosperity of agriculture in California.

Total Hours Expended 2017: 281

Kill the Bug, Recycle the Jug

This program is funded by a grant from the Feather River Air Quality Management District with the Sutter County Agricultural Commissioner's Office making an in kind contribution of approximately 98 man-hours annually. Growers are encouraged to bring their empty pesticide containers to permanent recycling locations or recycling events held throughout the year. In 2017 we recycled 112,000 pounds of used pesticide containers. A total of 899,957 pounds have been recycled since the program began in 2007.



STAFF RETIREMENTS

Sandy Schwall began her career with the Agricultural Commissioner's Office on May 1, 1998 as an Agricultural Field Assistant-Extra Help. Sandy Schwall was promoted to permanent status as Agricultural Field Assistant I on November 20, 2000. She was promoted to an Agricultural Field Assistant II on January 25, 2006 where she remained for the rest of her career. Sandy Schwall's primary duty was in Pest Detection. This program provides the second line of defense against exotic pests through early detection of new introductions before they become widely established. In 2017, she placed 665 exotic insect traps and serviced them 5,072 times. In 2006, Sandy received the Department's Employee of the Year Award. Known throughout Sutter County as the lady who comes to check the bug traps, Sandy is thought to have a photographic memory of every fruit tree in the County. Her retirement leaves more time for trips to Fort Bragg and visiting her kids and grandkids across the country.



Jan Kendel began her career with the Agricultural Commissioner's Office on April 1, 1998 as an Agricultural & Standards Biologist I. Jan Kendel was promoted to Agricultural & Standards Biologist II on October 23, 1999 and on November 1, 2000 she was promoted to an Agricultural & Standards Biologist III where she remained for the next 17 years. She spent her entire career in the Pesticide Use Enforcement Division while assisting in other areas of the department. Jan Kendel was passionate about outreach and education on pesticide use. In her career she has held over 597 Continuing Education classes and has trained over 27,656 people. In 2007, Jan Kendel established the Kill the Bug; Recycle the Jug program. This pesticide container recycling program has kept almost one million pounds of pesticide containers out of the landfill since its inception. In 2000 and 2007, Jan received the Department's Employee of the Year Award. Jan has plenty to keep her busy in retirement including service as a UCCE Master Gardener, growing and selling flowers and pumpkins at the local Certified Farmer's Market and of course her tireless advocacy work to humanely address the local cat populations.

Gina Krog started as an extra help Account Clerk with the Agricultural Commissioners Office in 2004 before transferring to a full time position with the Auditor's Office. In November 2005 she accepted a secretary position in the Pesticide Use Enforcement Division. Gina has always greeted our growers with a smile and a helping attitude. In 2009, Gina received the Department's Employee of the Year Award for her outstanding customer service to the regulated public. Never one to be shy at Department functions, Gina became the unofficial staff photographer for many years. She documented nearly every luncheon or party by gently, and sometimes not so gently, prodding groups into celebratory pictures for the 13 years she worked at the Agricultural Commissioner's Office. Gina retired on December 29, 2017 to spend more time traveling, seeing her grandchildren in Hawaii and serving the community.



**AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS AND MEASURES**

Lisa D. Herbert

**ASSISTANT AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS AND MEASURES**

Vacant

DEPUTY AGRICULTURAL COMMISSIONER/SEALER

Scott Bowden

Nicolas Oliver

AGRICULTURAL & STANDARDS BIOLOGIST III

Hardeep Bains

Michael Berry

Kim Hicks

Janice Kendel

Janet Kirkman

Kevin Putman

AGRICULTURAL & STANDARDS BIOLOGIST II

Rebecca Mendonza

Sean Nelson

AGRICULTURAL & STANDARDS BIOLOGIST I

Ryan Coleman

Elisabeth Quick

Molly Yager

AGRICULTURAL FIELD ASSISTANT II

Sandra Schwall

ANIMAL DAMAGE CONTROL SPECIALIST

Jim Kincaid

SUPPORT STAFF

Tara Cole - Accounting Technician I

Gina Krog - Secretary

Allyson Wadkins - Secretary

