



UC
CE

University of California
Agriculture and Natural Resources

Cooperative Extension

**UC Cooperative Extension
Glenn County**

<http://ceglenn.ucanr.edu>

**ANNUAL
REPORT
2015-16**



CONTENTS

- 3 – Message from County Director
- 4 – Mission
- 5 – Farm Advisors
- 7 – 4-H Youth Development Program
- 8 – 4-H Program Impact
- 9 – Master Gardener
- 10 – Resources & Fiscal Management
- 11 – Looking Forward
- 14 – Donate & Volunteer
- 15 – Donors

Message from Director

Dear Friends,

The University of California Cooperative Extension (UCCE) was established in Glenn County in 1915. We provide education, outreach and research activities to the County. Nestled within the Division of Agriculture and Natural Resources, UC Cooperative Extension is best described as a vast network of UC researchers and educators. In return for University work in our community, the County provides support to UCCE including administrative staff, facilities, transportation, utilities, and other support.

The 2015-16 year brought many changes to the Glenn County office. We said goodbye to our dedicated Administrative Services Officer, Jody Samons, who served this office for an admirable 36-years. We look forward to continuing to work with Jody in her new position as Glenn County Community Development Director. We also said goodbye to 4-H Program Representative Jamie Marron, but were happy to welcome her into her new role as a volunteer 4-H leader. Our Master Gardener Program Coordinator, John Shovein also wrapped up his tenure with UCCE in 2016. We wish all of our previous staff the best in their new endeavors and are pleased to introduce our new staff in the pages that follow.



**Betsy Karle, County Director
UC Cooperative Extension- Glenn**

We owe a debt of gratitude to the Glenn County Board of Supervisors for their steadfast support of our office and our programs. We are here to serve all residents of the county and base our programs and research on local needs. Our work would not be possible without the hundreds of volunteers who extend our reach through the Master Gardener Program and the 4-H Youth Development Program. Our local partners are integral to our success: we can further leverage our resources by working with partners like the Natural Resources Conservation Service, the Resource Conservation District and the Farm Bureau. Our locally relevant applied research would be impossible without the collaboration of dozens of forward thinking and innovative farmer cooperators. The insight from these leaders within our food production systems is essential to conduct our problem-solving research. We would not be able to offer our programs at little or no cost to our community without the support of our private donors. We sincerely thank each and every individual and business who has invested in our future!

Looking forward to a bright future here in Glenn County!

Most Sincerely,

A handwritten signature in black ink that reads "Betsy Karle". The signature is written in a cursive, flowing style.

Mission

Engage UC with the people of California to achieve innovation in fundamental and applied research and education that supports

- *sustainable, safe, nutritious food production and delivery*
- *economic success in a global economy*
- *a sustainable, healthy, productive environment*
- *science literacy and youth development programs*

Programs

Farm Advisor

Academic advisors in the areas of agriculture production and natural resource management conduct applied research and provide educational opportunities to farmers, land managers and allied industry. Research is conducted in partnership with agriculture producers and land managers to address issues of importance to the local community.



4-H Youth Development Program

4-H helps young people to reach their full potential as competent, confident, caring leaders of character who are connected to others and contribute to their communities. The focus of the 4-H programs is positive youth development through activities in science literacy, healthy living, and citizenship.



Master Gardener

The Master Gardener program extends research-based knowledge and information on home horticulture, pest management, and sustainable landscape practices to the residents of Glenn County. UCCE Master Gardeners of Glenn County conduct workshops, contribute articles to local newspapers, maintain a Plant Clinic, offer educational presentations to community organizations, and provide informational booths at county events.

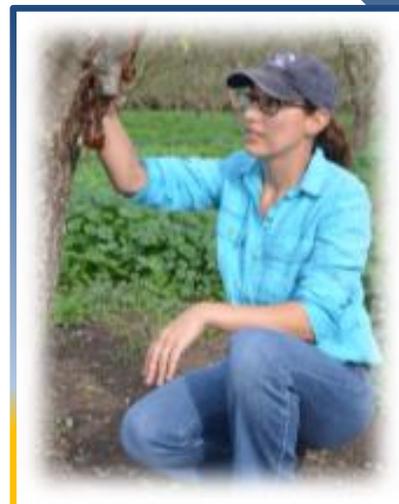


Orchard Farm Advisor

About: The Orchard program serves growers and pest control advisors (PCAs) who farm tree crops in Glenn, Butte & Tehama counties. We provide research based information and advice on all aspects of orchard production from pre-plant to orchard removal.

Research: This research program aims to improve production practices and the success of our local industry. Research projects funded in 2015-2016 include:

Project Title	Funded amount
Cover crop systems for almond orchards: exploring benefits and tradeoffs to inform management	\$3,300
Mechanical topping of dormant 2 nd leaf almonds	\$6,000
Biological control of brown marmorated stink bug, <i>Halyomorpha halys</i>	Supplies
Cover crops to mitigate heat at prune bloom	\$8,000
Measuring heat risk at prune bloom	\$3,000
Regional almond variety trial	\$70,000
Young walnut orchard management: effects of heading and painting	\$6,000
Development of disease resistant walnut rootstocks	\$29,000
Total:	\$125,300



Entered Cooperative Extension in 2014

Meetings: There are annual meetings offered for growers and PCAs of olives, almonds, & walnuts. These meetings present current research updates and best management practices. Additionally, they offer continuing education (CE) credit opportunities through California Department of Pesticide Regulation and Certified Crop Advisor (CCA credits). In 2016, we offered a total of 5 hours of CCA credits and 6.5 hours of CE credits to a total of approximately 430 meeting attendees. Additionally, the program has provided talks to over 1,200 attendees at meetings across the state.

Newsletters: Newsletters are mailed to subscribers 3-4 times per year, either by hard copy or email. In addition, newsletter articles and archived articles are posted online at www.sacvalleyorchards.com.

Current newsletters include:

Newsletter	Number of Annual Issues	Number of Subscribers
Sacramento Valley Almond Newsletter	4	515
Sacramento Valley Prune Newsletter	4	366
Sacramento Valley Walnut Newsletter	3	488
Olive Facts	1	628
Total:	12	1997

Farm calls: We meet one-on-one or in small groups with growers and PCAs to address problems and help provide data to support important management decisions. On-site help and discussions include topics such as evaluating soil suitability, improving irrigation practices, or troubleshooting poor tree vigor. In 2016, the Orchard program tallied 73 farm calls, had 98 phone consultations and 13 office meetings with clientele.

Dairy Farm Advisor

About: The dairy program serves producers and allied industry by conducting research activities to guide on-farm management decisions. Information about management practices for all types of dairies is available and programmatic activities are driven by clientele needs.

Research: The primary research project in the 2015-16 year was a risk assessment and analysis for dairy calf respiratory disease management. Respiratory disease has lasting impacts on animal productivity and the research team pursued strategies to aid in early diagnosis and management. A convenient scoring system to diagnose the disease was developed with veterinarians and professors across the University of California continuum and local dairies participated in a year-long analysis of respiratory disease and management practices in their herds. The team is working to develop a risk analysis tool to improve management of respiratory disease and reduce unnecessary antimicrobial use.



**Betsy Karle
Entered Cooperative
Extension in 2007**

Karle also worked with the UC Davis School of Veterinary Medicine to evaluate newborn calf management practices and associated effects on calf health and immunity. Nutrient management and water quality on dairy cropland remains an active area of research as well. Karle continued work with colleagues in surrounding counties to develop rice straw preservation practices (rice strawlage) to improve feeding quality for livestock. Soil health practices on dairy farms are an emerging area of research and educational activity.

Newly funded research projects will investigate mitigation methods for short-lived climate pollutants (methane) in manure management systems and reduced use of antibiotics to prevent mastitis in dairy cows.

Educational Offerings: The inaugural Golden State Dairy Management Conference, hosted by UCCE, was held in March. The statewide conference was organized by Karle and colleagues throughout the state and was the first of its kind to highlight dairy research from across the UC system. Four issues of the California Dairy Newsletter, collaborative, [research-based dairy newsletter](#), were distributed to subscribers.

4-H Youth Development Program

4-H helps young people to reach their full potential as competent, confident, caring leaders of character who are connected to others and contribute to their communities. The focus of the 4-H program is positive youth development through activities in science literacy, healthy living, and citizenship.

Glenn County maintains a large [4-H program](#), which includes:

- 9 community clubs
- Nearly 207 adult volunteers
- Over 500 youth members

All 4-H leaders are volunteers who donate thousands of hours of their time, per year, to provide leadership and training to youth ranging in age from 5 to 19 years.

In 4-H, youth design and participate in their own programs and activities. This unique learn-by-doing model teaches essential skills that youth will use throughout their lives, including:

- Project skills
- Setting goals
- Self-reflection
- Adapting to new situations
- Communication skills
- Responding to the needs of others



Sara van Tol
Entered UC Cooperative
Extension in 2016

Our programs focus on the core objectives of 4-H: Community Service, Healthy Living and S.T.E.M. (Science, Technology, Engineering and Math) and they provide youth members the opportunity to learn important skills in a safe and positive environment. Youth develop life skills including: public speaking, creative writing, art and can participate in healthy living sports programs that are non-competitive and focus on skill building and team work. Teens are trained to become mentors, leading projects for younger members.

In 2015-2016, the Glenn County 4-H Youth Development Program raised over \$20,800 in fundraisers and \$6,465 in donations. These funds are used to purchase curriculum, supplies for events and trainings, summer camp and staffing. These funds made it possible for over 500 youth to participate in fun, educational hands-on learning experiences and skills that help them to navigate life challenges.

4-H participants are
1.9 times
more likely to have higher levels of positive youth development.

SELF-REFLECTION
SPARK
THRIVE
MINDSET
GOAL
MANAGEMENT

*The Positive Development of Youth: Comprehensive Findings from the 4-H Study of Positive Youth Development, 2013.
<http://www.4-h.org/about/youth-development-research/positive-youth-development-study/>

4-H Program Impact

How we serve our community

How do 4-Hers Participate?

- 9 4-H Clubs in Glenn County
- 516 Youth Members in local 4-H clubs
- 207 Adult Volunteers in local 4-H clubs
- 114 campers in 4-H overnight camp

Program Emphasis



STEM Curriculum



SCIENCE



TECHNOLOGY



ENGINEERING



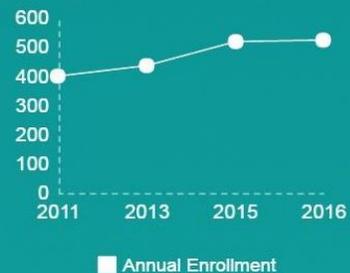
MATH

Impact



4-H youth are 1.7 times more likely to take courses or pursue a career in science, technology or engineering.

4-H members are 1.9 times more likely to get better grades in school and 2.1 times more likely to report high engagement in school.

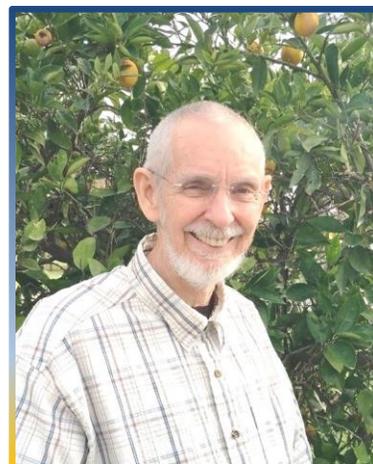


Master Gardener

The UC Master Gardener Program of Glenn County started in 2011 with a class of 15 students. Since then, three more classes have graduated in the program, the most recent being the class of 2016 with 14 students. These students have worked on Master Gardener Projects for a documented total of 3,063 volunteer hours since 2011. In addition, Master Gardeners in Glenn County have attended 628 hours of Continuing Education in which they learned of new research, new skills and new strategies to share with their neighbors in the county.

Some recent UCCE Glenn County Master Gardener projects include:

- **Plant Clinic:** The Orland Plant Clinic provided research-based responses to 97 questions on a wide range of horticultural topics in 2015-16. Many of the questions were related to the ongoing drought of this period. A Willows Plant Clinic was added to the program in 2016, with sessions held at the Willows Library and the Willows Farmers' Market.
- **Workshops:** UCCE Master Gardeners in Glenn County presented two workshops, one in Orland and one in Willows, on strategies to combat the effects of the drought on the home garden. In addition, a workshop on budding and grafting with fruit and nut trees was held near Hamilton City.
- Master Gardeners have contributed biweekly articles to a local newspaper on a variety of gardening topics. In 2016, The UCCE Glenn County Master Gardener program was chosen to provide the lead article and photos for the Spring Gardening issue of the area's largest newspaper.
- Master Gardeners have made presentations to the Hamilton City Lions Club, the Willows Rotary Club, and the Orland Garden Club on gardening topics. In addition, informational booths were maintained at the Willows Craft Fair and Willows Farmer's Market.
- Master Gardeners created award-winning booths for both the 2015 and 2016 County Fair. These booths featured samples of ornamental plants from the yards of UCCE Glenn County Master Gardener yards.
- Six UCCE Master Gardeners from Glenn County attended an Integrated Pest Management Conference in Chico where they learned the latest information on the Asian Citrus Psyllid, weed management, and pesticides.

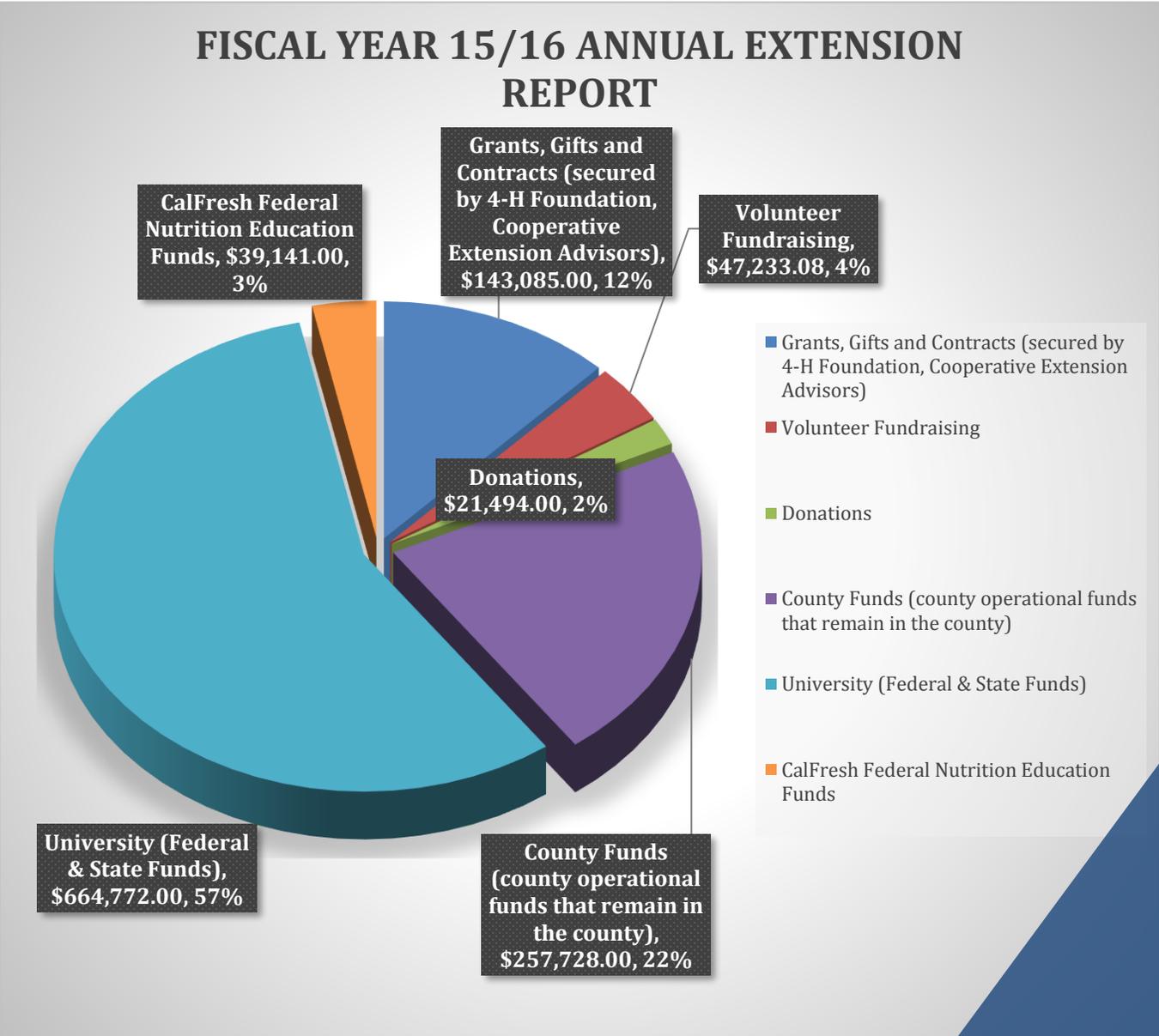


**Robert Scoville
Entered UC Cooperative
Extension in 2016**

Future plans for UCCE Master Gardeners of Glenn County include a demonstration and teaching garden adjacent to the UCCE Office in Orland. The first use of this ongoing project will be a Junior Master Gardening project for 4-H youth members.

Resources & Financial Management

The University provides advisors and community education specialists that conduct programs for Youth Development (4-H), Orchard Crops, Dairy, and Master Gardeners. Additional programming is provided by advisors from neighboring counties for rice, integrated pest management, irrigation and water resources, livestock, pasture and range management, strawberry nursery production and nutrition, family and consumer sciences. The value of the University's support of UC Cooperative Extension in Glenn County was \$664,772 for the 2015-2016 fiscal year, accounting for 57% of our total operating costs. Additionally, our staff generated \$143,085.00 in fees, grant funds and gifts to support program delivery in Glenn County. The County is responsible for office space, support staff, supplies and services necessary for program delivery. Community-based research, public service, outreach and education are integral parts of UCCE's service in Glenn County.



Looking Forward

UC ANR envisions a thriving California, where healthy people and communities, healthy food systems, and healthy environments are strengthened by a close partnership between the University of California and its research and extension programs and the people of the state.

The University remains connected and committed to the people of California, who enjoy a high quality of life, a healthy environment, and economic success in a global economy.

Cooperative Extension Staff

Not pictured: Jody Samons (former Administrative Services Officer), Jamie Marron (former 4-H Program Representative), John Shovein (former Master Gardener Coordinator)

Please take a minute to meet our staff!



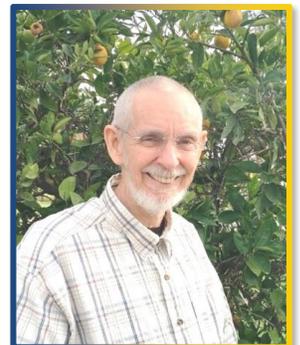
Betsy Karle
County Director/ Dairy
Advisor



Dani Lightle
Orchard Advisor



Sara van Tol
4-H Program
Representative



Robert Scoville
Master Gardener
Coordinator



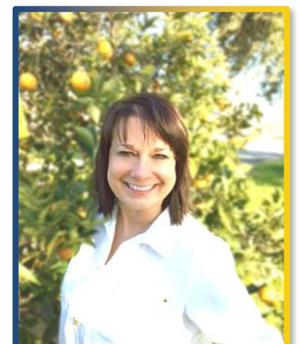
Lea Eddy
General Services
Specialist



Starryne Lefdal
Administrative Services
Analyst



Cindy Montes
Research Assistant



Gail Johnson
Office Assistant

Cross-County Staff

Cross-County



Richard P. Buchner

Title: County Director, Orchard Advisor

Specialty: Pomology for Tehama County. Strawberry nursery production in Northern California

Address:

Cooperative Extension Tehama County

1754 Walnut Street

Red Bluff, CA 96080

Phone: (530) 527-3101

Email: rpbuchner@ucanr.edu



Josh S. Davy

Title: Livestock, Range, and Natural Resources Advisor

Specialty: Livestock, Range and Irrigated Pasture

Address:

Cooperative Extension Tehama County

1754 Walnut Street

Red Bluff, CA 96080

Phone: (530) 527-3101

Email: jsdavy@ucanr.edu



Luis Espino PhD

Title: Rice Farm Advisor

Specialty: Entomology, Agronomy

Address:

Cooperative Extension Colusa County

PO Box 180, 100 Sunrise Boulevard

Suite E

Colusa, CA 95932

Phone: (530) 458-0578

Email: laespino@ucanr.edu



Allan Fulton

Title: Irrigation and Water Resources Advisor

Address:

Cooperative Extension Tehama County

1754 Walnut Street

Red Bluff, CA 96080

Phone: (530) 527-3101

Email: aefulton@ucanr.edu



Emily J. Symmes Ph.D.

Title: Area IPM Advisor

Specialty: Integrated pest management

Address:

Cooperative Extension Butte County

2279-B Del Oro Avenue

Oroville, CA 95965

Phone: 530-538-7201

Email: ejsymmes@ucanr.edu



Jona Pressman

Title: Nutrition Education Program Manager

Specialty: UC CalFresh Nutritional Education Program

Address:

Cooperative Extension Butte County

2279-B Del Oro Avenue

Oroville, CA 95965

Phone: (530) 538-7201

Email: jmpressman@ucanr.edu

Website: <http://cebutte.ucanr.edu>

Emeritus Advisors



William H Krueger

Title: Farm Advisor Emeritus

Specialty: All tree crops in Glenn County and olives in Tehama County, integrated pest management

Address:

Cooperative Extension Glenn County

PO Box 697, 821 E. South Street

Orland, CA 95963

Phone: (530) 865-1152

Email: whkrueger@ucanr.edu

We Need Your Help

Your support of our community's UC Cooperative Extension through your gifts, volunteering and advocacy provides the resources we need to help identify and address the challenges we all face. Your contributions are used for staff, technical support, equipment, supplies and volunteer leader training when other sources of funding are not available.

Every Penny Matters

You can give online by visiting <http://ceglenn.ucanr.edu> OR scan the **QR code** with your mobile device; it's a quick, easy and secure way to help your local Cooperative Extension programs!



Volunteer and Help Make a Difference



Not everyone can make a financial contribution. We need your time too! If you want to volunteer to help at an event or even in the office, please complete the form below and return to the UCCE Office.

- Volunteer at an event
- Volunteer in the office
- Volunteer in a different way: _____

Please visit our website <http://ceglenn.ucanr.edu> to learn more, or call us at (530)865-1107. Send this form by mail to our office at PO Box 697, Orland, CA. 95963

Name: _____ **Phone:** _____

Email: _____

Address: _____

Thank You to Our Donors

We have made every effort to provide a complete listing of donors, honoring requests for anonymity. We apologize for any omissions.

BRONZE (\$1-99)

Adele Stout
Alan Carrier
Andy Schram
Bob and Carol McKinney
Bob and Pem Lester
Bob and Sylvia Sexton
Bobbie Jean Dorvall
Carly Ranch
Carolyn and Jack
Pendergrass
Charles and Shirley Gee
Charles Simmons
Collin and Leana
Stoltenberg
Connie King
Cookie Hanks
Curt and Sara Martin
Dave DeMello Trucking
David Powell
Diana Domingo
Don and Kim Barceloux
Doug Meents
Fair Trade Corner, Inc.
Flynn's Welding & Machine Shop
Gail and Wanda
Zimmerman
Harold and Gloria Hervey
Harold and Kathy von
Bargen
J & L Bees Pollination
Jacquie Deitz
Janet Gallegos
Jeff and Linda Joseph
Jessie Westcamp
Jim & Evelyn Weir
John Roller
Ken and Donna Peterson
Ken Eden
Lily Alberico
Linda Corbin
Louie Johnson
Lynda Fitzgerald
Marcus Koehn
Mary Diack-Miller
Maudrie Smith

Mike and Shay Alves
Nick and Kathy Coatney
Olive Growers Council
Oscar and Jean Williams
Ralph Knou
Ray and Darlene Odom
Rick Beatty
Rick Plocher
Robert Eden
Russ and Lea Osborn
Sandy Fecher
Scott Murphy
Stuart and Emily Rowe
Tom and Dianna Dawson
Ute Wirth
William Nord
4 Anonymous donors

SILVER (\$100-249)

6 T's Farm
Adam and Jackie Kennedy
Alderson Dairy
Alex Vereschagin
Andrea Feeney
Andrew Janos
Bar M Cattle Company
Bill and Dianne Krueger
Bill and Jen Carriere
Bill Burrows
Bob Gaines Ranch
Bonnema Ranch
Bruce Grivey
Chris Johnson
College City Warehouse
Cotton Bow Ranch
Couto Dairy
Craig and Gina Taylor
Dale and Patti Reed
Dale Wallander
David and Diane Taylor
Del Reimers
Deniz & Pinheiro Farms
Dennis Biro
Don and Bonnie Hibdon
Eduardo and Patricia
Galvez
Endres Family Farm

Erick Nielsen Enterprises, Inc.
Erickson Orchards
Ernie Pieper
Ernie Simpson
Eugene and Cheryl Massa
Fred and Willynda Freitas
Genie Air
George and Joanne Overton
Georgio Zografos
Glennair Ranch, LLC
Greg and Barbara Overton
Heitkam's Honey Bees
Heritage Insurance
Jamie and Mildred Tucker
Jim and Diane Jones
John and Barbara
McCracken
John and Patricia Holm
John and Patty Montz
John and Peggie Amaro
K & S Farms
Kennedy Ranch
Kenneth Gilmore
Lady Bug Doherty
Larry and Michelle Massa
Larry and Theresa
Thurman
Lee Cole
Lenus Landberg
Leonard and Marsha Kaiser
Lloyd James
Lohse Ranch
Louella Kennedy
Maben Farms
Margaret Ann Cole
Mark and Clifta Atlas
Martin Bros.
Martinez Ranches, Inc.
McDermott Livestock
Michael and Susan Silveira
Mid-Valley Veterinary Hospital
Mike and Laurie Murray
Mike Garcia Farms, Inc.
Odyssey Farms
Oliver Hill

Overton Orchards
Paul and Jill Martin
Paulos Collision Repair
Primo Carrillo
Ray and Jeanne Collette
Raygoza and Son Hay, Inc.
Renaud Ranch
Richard Hull Farms
Rick Massa
Ron and Doreen Mendes
Ron Simson Land Leveling
Roy Holzapfel
Ryan Beck
Schmidt Farms
Scott and Josie Corporon
Shirley Boracci
Silveira Farms
Skala Ranch Partnership
Stan and Ces Hawthorne
Terry and Judy Brinson
Van Uong
Violet Grivey
W.L. Stile & Son, LLC

Weller Ranches, Inc.
Yvonne Koehnen
Zane Amaro Farms
5 Anonymous donors

GOLD (\$250-499)

A. L. Gilbert
Bob and Laura Sailsbery
Carriere Family Farms
Craig and Susan
Vereschagin
Crain Orchards, Inc.
Darin and Leila Titus
Darlene Beale
David and Debbie Garcia
Don and Barbara Parisio
Frank Reimann
George Swaner
Gruenwald Family
Hart Farms
Herb and Ginger Holzapfel
Keyawa Orchards, Inc.
McCorkle Farms
Mendonca Orchards, Inc.

North Valley Ag. Services
Punch and Jeanne Haskell
Robert Sanders Consulting
Schager Dairy
Simplot
Steve and Shelly Brown
Stino and Donna Bassetti
Wilson Farms
1 Anonymous donor

DIAMOND (\$500-999)

C. F. Koehnen & Sons, Inc.
Escalon Livestock Market,
Inc.
Gary and Cindy Nunes
GSA Farms, Inc.
K & S Spreading & Hauling,
Inc.
Musco Olive
Safety Tire Service

PLATINUM (\$1000+)

Farm Credit Services of
Colusa-Glenn
Rue & Forsman
1 Anonymous donor

Across California, the University of California's Cooperative Extension offices are local problem-solving centers—the bridge between local issues and the power of UC research.

Our county-based staff are part of the community – we live and work in the areas we serve. We are stewards, problem-solvers, catalysts, collaborators, and educators.

We work in full partnership with federal, state, county, and private resources.

We are UC Cooperative Extension.

GLENN COUNTY, CALIFORNIA

Glenn County is nestled in the northern end of the Sacramento Valley, 100 miles north of Sacramento, where the major commodities are almonds, rice, milk products, olives and livestock. Created out of the northern portion of Colusa County, Glenn County was incorporated on March 5, 1895. Willows, the county seat, is located in the southern part of the county, while Orland is located in the northern end. Hamilton City is situated 10 miles east of Orland where State Highway 32 crosses the Sacramento River, while Elk Creek can be found at the western edge of the county, right next to the beautiful Mendocino National Forest. Named for Dr. Hugh J. Glenn, the largest wheat farmer in the state during his lifetime, Glenn County is situated at the cross-roads of Interstate 5 and State Route 32, just 20 minutes from the educational opportunities of California State University, Chico, and the modern medical facilities located in Chico and Redding. Hunting and fishing are within an hour's drive, and small town living is one of the main reasons people choose to live and raise their children here.

Glenn County
Cooperative Extension Glenn County
PO Box 697, 821 E. South Street
Orland, CA 95963
Phone: (530) 865-1107
Fax: (530) 865-1109
e-mail: glenn@ucanr.edu

Director: Betsy Karle

University of California
Agriculture and Natural Resources
Glenn County





University of California
Agriculture and Natural Resources

Cooperative Extension

**UC Cooperative Extension
Glenn County**

<http://ceglenn.ucanr.edu>

Connect With Us!

(530) 865-1107 | cglenn@ucanr.edu



ANNUAL REPORT 2015-16