

**University of California
Cooperative Extension
Monterey County**

2005-06 Impacting the County

Bringing Resources to Monterey County

Mission

To create and disseminate research-based information and to provide educational experiences to promote beneficial change in agriculture and the environment, communities, local families, and youth.

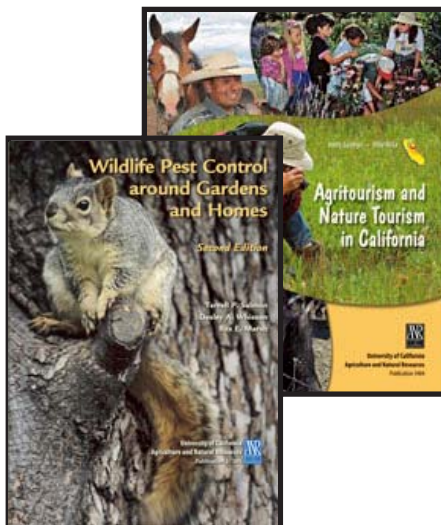
History

The Land Grant University and Cooperative Extension was established under the Morrill Act of 1862 and the Smith-Lever Act of 1914.

Cooperative Extension has serviced Monterey County since 1918 and continues to meet the evolving needs of the community.

**University of California
Cooperative Extension
Monterey County**
1432 Abbott Street
Salinas, CA 93901
Phone (831) 759-7350
FAX (831) 758-3018

We're on the web!
Visit us at <http://cemonterey.ucdavis.edu>



Publications for your education and interest . . .

Cooperative Extension is your local door to resources of the University of California and the greater community and academic researchers.

RESOURCES & COLLABORATIONS BROUGHT IN BY LOCAL ADVISORS

University of California Davis

Department of Land, Air & Water Resources -
Louise Jackson, Stuart Pettygrove

Department of Plant Pathology -
Krishna Subbarao, Tom Gordon

Department of Plant Science - Husein Ajwa,
Steve Fennimore, Tim Hartz, and
Tom Lanini

Department of Vegetable Crops -
Trevor Suslow

University of California Riverside

Department of Entomology - John Trumble

University of California Santa Cruz

Joji Muramoto
S. Gliessman

University of California Farms Advisors -

Aziz Baameur, Mark Bolda, Oleg Daugovish,
Mark Gaskell, Michelle LeStrange,
Daniel Marcum, Steve Tjosvold,
Thomas Turini

California State University Monterey Bay -

Farm to School Program

University of Arizona -

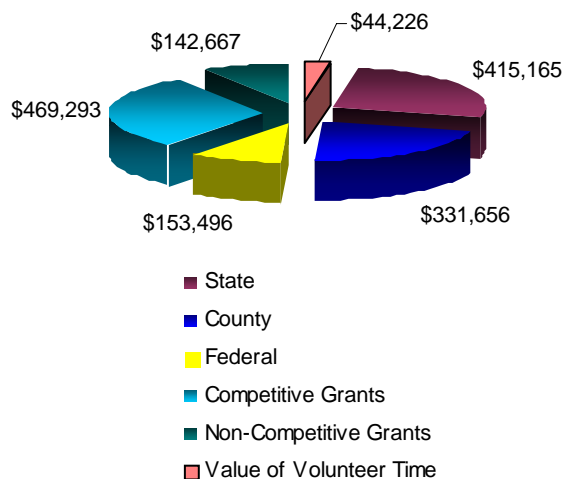
John Palumbo, David Kerns

University of Arkansas - J. Correll, T. Morelock

University of Florida - Ken Perneznny

Michigan State University - M. K. Hausbeck,
R. S. Bounds

DIRECT FUNDING 2005-06



UNIVERSITY of CALIFORNIA
**Agriculture &
Natural Resources**



University of California President Dynes, speaking with Farm Advisor Richard Smith, learns first hand about Monterey County agriculture.

Productivity

Monterey County Cooperative Extension. . .

Attendees at UCCE Educational Meetings	4,578
Educational Hours Offered by Staff	366
Diagnosics Provided by Advisors:	1,676
• Urban - 401	
• Agricultural - 1,275	
Research Dollars Generated by Staff	\$611,960
Research-Based Articles:	270
• Published Locally - 201	
• Peer Reviewed - 21	
• Popular - 48	
4-H Youth Development Program	
• Years Experience Offered by Adult Volunteers	1,854
• Community Service Hours Donated by Youth	12,075
• In-Kind Service Totals from Adult Volunteers	\$44,226
Newsletter Distribution Per Year	12,572
• <i>Crop Notes</i> - 1,728	
• <i>News Notes</i> - 7,320	
• <i>Favorite Family Food</i> - 1,476	
• <i>Edible Express</i> - 1,218	
• <i>Viticulture News</i> - 830	

ADVISOR AWARDS ~ HONORS ~ APPOINTMENTS

Entomological Society of America
Associate Editor, Arthropod Management Tests

Award of Excellence, California Weed Science Society

Joseph M. Ogawa Research & Teaching Endowment, UC Davis

American Phytophological Society (APS) Associate Editor, Plant Disease Journal

American Vegetable Grower Journal, Editorial Advisory Board

13th International Sclerotinia Conference, Chair - Asilomar, CA

Researcher and Diagnostician for the National Plant Diagnostic Network (The National Plant Diagnostic Network (NPDN) is primarily intended to be an early warning system in the event of bioterrorism (the deliberate release, by terrorists, of devastating crop pathogens). This network also monitors the development of invasive species and significant, naturally occurring plant disease situations.)

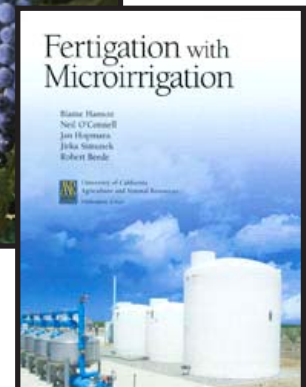


EXTENDING OUR EXPERTISE TO OTHER AGENCIES AND ORGANIZATIONS

Salinas City Elementary School District
Camp S.E.A. Lab
United States Department of Agriculture
United States Army
California National Guard
Monterey County Health Department - WIC
Monterey County Waste Management District
Salinas Valley Solid Waste Authority
City of Monterey
Monterey County Asset Builders Alliance
EPA Region 9 & Federal Sustainable Ag Resources & Education
CMI Mycological Institute - The Netherlands (Verkley)
Artichoke Advisory Board
Monterey County Agricultural Education, Inc.
Monterey County Farm Bureau
Monterey County Cattleman's Association
Monterey County Fair
Salinas Valley Fair
Salinas Valley Fair Heritage Foundation
Santa Cruz County Fair
Salinas Californian
South County Newspapers
Gonzales Young Farmers
King City Young Farmers and Ranchers

Division of Agriculture and Natural Resources -

your resource to quality peer-reviewed products. Whether you're looking for advice on crop production, pest management, study materials for DPR exams, nutrition, or gardening - you'll find it at your local Monterey County Cooperative Extension Office, 1432 Abbott Street, Salinas, CA 93901 or visit us online at <http://cemonterey.ucdavis.edu>



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Agricultural Productivity

We help those who feed and clothe. ANR's professional staff of farm advisors and specialists work side-by-side with California farmers, searching for solutions to new problems, boosting crop production with precision pest control and fertilization practices and finding ways to protect food after harvest as it makes its way to market.



Before: Symphylans are serious pests of many vegetable crops, attacking the roots. Because they live below the ground, they are hard to detect and control. They destroy the lettuce in its early growth stages.



After: University of California Cooperative Extension research has developed a technique involving slices of raw potato that growers and PCA's can use to sample for these pests and apply pesticide treatments when necessary. This results in uniform stands and higher yields for growers.



Before: Devastating downy mildew disease causes crop loss in the high value crop spinach. New mildew races continue to develop, requiring on-going research.



After: University of California Cooperative Extension collaborative research on fungicides and resistant varieties restores quality to spinach.

Organic Productivity



Before: Based on work done by University of California Cooperative Extension years ago, organic growers found a solution to their problem of aphids in lettuce by planting rows of flowers in their fields. The lettuce aphid makes lettuce unfit for sale due to contamination, but they make great food for the immature stages of hover flies.



After: Continuing University of California Cooperative Extension research shows the tiny larvae of hoverflies hatching from eggs laid by the adult on lettuce. Then they travel through the plant, eating aphids. Each larva can eat hundreds of aphids. By encouraging the presence of hoverflies, crop damage by aphids is minimized.

Sustainable Farming



Before: Weeds are a big problem in agriculture. If left to grow, they harbor pests and reduce the yield of market crops. Controlling weeds is costly.



After: University of California Cooperative Extension researchers are working with cultural practices that help to reduce weeding costs and protect the environment.



Before:

- Weed control based on tillage between rows and the use of pre-emergent herbicides.
- Dust from tilled soils promotes higher potential for mite outbreaks.
- Lower soil organic matter.
- Higher potential for offsite movement of soil, water, and nutrients



After:

- Effective weed control with a reduction in herbicide use.
- Reduction in dust reduces mite outbreaks.
- Improvement in soil organic matter and soil tilth.
- Reduction in the potential of offsite movement of soil, water and nutrients.
- Economic analysis of cost consequences of floor management practices.

Water Quality and Irrigation



Before: Run-off from an irrigated field can carry a high amount of sediment and nutrients into adjoining creeks and ditches. Regulatory and environmental pressures dictate against this.



After: University of California Cooperative Extension research developed ways to add to the irrigation water inexpensive polymer which prevents soil erosion and greatly improves water quality.

Saving Nature's Bounty

We value natural California. We serve the land and its people. A growing appreciation for California's stunning wildlands and greater awareness of human impacts on the state's land, air and water resources has made environmental stewardship increasingly important. Science-based knowledge is vital to making intelligent decisions about the natural resources.



Before: Sudden oak death disease has been killing tanoak, oak, and other plants in local forests.



After: The disease can spread to nursery plants, such as rhododendron, as well. University of California Cooperative Extension researchers are working to prevent disease losses to local nursery stock. Studies on fungicides and pathogen host range will help the growers and prevent economic loss.



Before: Empty fishing nets are not a good. To prevent overfishing, University of California Cooperative Extension conducts research on the distribution, abundance, and movements of marine fishes to help promote the wise use, conservation, and management of valuable fishery resources.



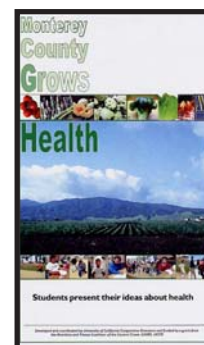
After: Using the Delta submersible, we compare 1993 data to today's fish species, size and density of populations. These comparisons allow us to develop recommendations that lead to healthy fishery populations.

Developing Healthy Lifestyles

We care for health and well-being. Safe, affordable and nutritious food is a necessity for all Californians. From the farm to the fork, ANR offers research and outreach efforts that ensure the wholesomeness of the California food supply.



Before: California spent \$28 billion on obesity-related costs in 2005. The percentage of overweight and obese children and adolescents increased by 6% between 2001 and 2005. Poor eating habits and inadequate physical activity account for 33.8% of Monterey County students being obese. Fast food commercials and cheap, readily available high-sugar, high-fat foods compete against optimum health for children.



After: The Nutrition Education Program for Youth and Adults puts delicious and healthful meals within the budgets and abilities of county residents. In 2005, over 20,000 students benefited from presentations, or as participants and recipients in several of UCCE's special projects. UCCE developed *Monterey County Grows Health* to demonstrate student understanding of nutrition and fitness concerns to residents in South Monterey County and beyond.

Developing Tomorrow's Leaders

We discover so we may share. We nurture the future. University of California Cooperative Extension's flagship for children is the time-tested 4-H program, which offers local youth experience and instruction in animal management, computers, science, cooking, gardening, leadership and many other subjects. The 4-H curriculum is also used in after-school programs, which substitute safe, educational environments for unsupervised, unproductive afternoons.

4-H Community Service



Before: 4-H members saw the need to beautify their local fairgrounds and establish a recycling project. This is one of the many community service projects conceived of and conducted by 4-H youth.



After: Club members placed recycling bins throughout the fairgrounds, sorted the recycling materials, transported the items to the local recycling center, and donated the money from their efforts to local charities.

Academic Achievers



Before: Relative ranking of U.S. students on international assessments gauges U.S. students' performance against peers in other countries and economies. Among Organisation for Economic Co-operation and Development (OECD) nations participating in a recent assessment of how well 15-year-old students can use mathematics and science knowledge, U.S. students were at or near the bottom of the 29 OECD members participating. (National Science Foundation)



After: The University of California Cooperative Extension introduces children to learning concepts that lead them through activities that utilize the major themes and provide real-life backdrops for learning. At Camp S.E.A. Lab - (Science Education Adventure) students construct an ROV at UC Santa Cruz. In all aspects of S.E.A. Lab, students and teachers are exposed to some of the most sophisticated technology and instruments available to science, researchers, and policy makers.

We share our classroom with the public agencies and for agricultural-related trainings. In 2005-06, approximately 58 public agencies, cooperatives, commissions, associations, local non-profits, local, state, and federal agencies utilized our facility for over 426 classes, employee safety trainings, public information meetings, and gatherings.

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cemonterey.ucdavis.edu](http://cemonterey.ucdavis.edu)

Programs Provided by Monterey County Cooperative Extension

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Vegetable Crops & Weed Science Advisor

Richard Smith rifsmith@ucdavis.edu

Viticulture Advisor

Larry Bettiga lbettiga@ucdavis.edu

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From Santa Cruz County:

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Marine Resource Advisor

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Strawberries & Caneberries Advisor

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From San Luis Obispo County:

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*County of Monterey Funded Positions