



University of California Cooperative Extension, Marin County
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MARIN COUNTY BOARD OF SUPERVISORS

Accomplishing our mission in Marin would not be possible without the strong and consistent support of the

Our school outreach programs provided nutrition and science education to 6,400 youth at community and Farm Day events, in school gardens, and childcare facilities.

2,239 people were served in 41 workshops, conferences and tours organized with our community partners.

College campus.
Open Space, City of San Rafael, Falkirk Center, and College of Marin Indian Valley California Oak Mortality Task Force, McEvoy Ranch, Marin County Parks and Bay Agricultural Group, Tomales Bay Watershed Council, Marin Farmers Markets, Resources Conservation Services, Marin Resource Conservation District, Tomales Libraries, Marin Food Systems Project, Marin Art and Garden Center, Natural partment, Marin County Stormwater Pollution Prevention Program, Marin County Farm Bureau, Marin County Community Development Agency, Marin Fire Department, Marin County Office of Education, Marin County Agricultural Commission, Marin Organic, Marin Agricultural Land Trust, Marin County Agricultural Com- The events were co-organized with our many community partners, including:

Our goal is to ensure that high quality, creative, and integrated research and extension programs are established and conducted in Marin County. To accomplish this, we need the help and expertise of many other groups and organizations.

WORKSHOPS/CONFERENCES/TOURS

Our local UCCCE goals include working to sustain our agricultural community, protecting our unique environmental heritage, and helping communities shape wise public policy by strengthening community participation and leadership skills in our youth and adults. In Marin County we are also known as the Farm Advisor's office.

The University of California Cooperative Extension in Marin is part of a statewide system that makes UC research-based information available to local agencies, industries, and the public. Cooperative Extension's mission is to serve California through the creation, development and application of knowledge in agricultural, natural and human resources.

MISSION AND GOALS

MARIN

community

ANNUAL REPORT

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

UCCCE 2007

Printed on recycled paper using vegetable-based inks

The Division of Agriculture and Natural Resources (ANR) is the umbrella organization for Cooperative Extension

Specialty Crops
Paul Vossen

Watershed Management
David Lewis

Livestock & Range Management
Stephanie Larson

Cross County Advisors
Lauren Gwin

4-H Youth Development
Jane Chin Young

Environmental Horticulture
Steven Swain

Academic Advisors
Ellie Rilla

Director/Advisor, Marin
Ellie Rilla

Horticulture Technician
Glenn Smith

Food Stamp Nutrition Education Program
Elsa Latini

Administrative Support
Frances Healey

Staff Research Assistant
Lauren Gwin

Outreach Coordinator
Sudden Oak Death

Grant Funded Support Staff
Janice Alexander

4-H Program Representative
Cindy Jensen

UC Non-Academic Staff
Lisa Bush

Student Intern Program
Anne Kehoe

President, Master Gardener Program
Karen Dewitler

4-H Secretary
Deborah Skaar

Organic & Sustainable Agriculture Coordinator
Steve Quit

Administrative Support
Effie Cook

Agricultural Ombudsman
Lisa Bush

Marin County Staff
Effie Cook



OUR PROGRAMS IN MARIN

For more details on each program area, visit our website at <http://cemarin.ucdavis.edu>, and click on the program area you're most interested in.

- Sustainable Agriculture
- Urban Horticulture
- Nutrition Education
- 4-H Youth Development
- Watershed Management
- Sudden Oak Death Coordination

OUR PARTNERS

UCCE is dedicated to the principle of service and believes that an informed and educated citizenry is necessary for the continued development of our society. Our goal is to ensure that high quality, creative, and integrated research and extension programs are established and conducted in Marin County. To accomplish this, we need the help and expertise of many other groups and organizations. Following is a list of some of the groups with whom we collaborated this past year to accomplish many of our jointly-held goals.

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> American Academy of Pediatrics - Chapter 1 American Cancer Society Bacich Elementary School Bahia Vista Elementary School Bayside Elementary School Bodega Marine Laboratory, UC Davis Bolinas-Stinson Resource Recovery Project Brookside School - Upper and Lower Campuses California Aquaculture Association California Coastal Conservancy California Department of Fish & Game California Department of Food & Agriculture California Department of Forestry & Fire Protection California Department of Health Services California Forest Pest Council California Oak Mortality Task Force Canal Childcare Center City of Novato City of San Rafael Coleman Elementary School College of Marin Community Alliance with Family Farmers Dance Palace, Pt. Reyes Department of Agronomy & Range Science, UC Davis Department of Community Development, UC Davis Department of Conservation & Natural Resources, UC Berkeley Department of Environmental Science, Policy & Management, UC Berkeley Department of Fish, Wildlife & Conservation Biology, UC Davis Department of Forestry, UC Berkeley Department of Plant Pathology, UC Davis Dixie Elementary School Edna Maguire Elementary School Environmental Education Council of Marin Fairfax/San Anselmo Children's Center Falkirk Center, San Rafael Golden Gate Farmers Market Association Hamilton Child Development Center Hamilton Elementary School Hog Island Oyster Company International Society of Arboriculture, Western Chapter Kaiser Permanente's Educational Theatre - Northern CA Kashia Band of Pomo Indians Laguna Elementary School | <ul style="list-style-type: none"> Lagunitas School District Laurel Dell Elementary School Lu Sutton School Lynwood Elementary School Manzanita Child Care Development Center Marin Academic Center Marin Agricultural Education Alliance Marin Agricultural Land Trust Marin Art & Garden Center Marin Center Marin Community Child Development Marin Community Foundation Marin Conservation Corp Marin Organic Marin County Agricultural Commissioner's Office Marin County Community Development Agency Marin County Dept. of Health & Human Services, Nutrition and Wellness Program Marin County Farm Bureau Marin County IPM Commission Marin County Libraries Marin County Office of Education Marin County Parks, Open Space & Cultural Services Marin County Wildlife & Fisheries Committee Marin Farmers Markets Marin Food Policy Council Marin Food Systems Project Marin Grape Growers Association Marin Learning Center Marin Municipal Water District Marin Organic Marin ReLeaf Marin Resource Conservation District Mary E. Silveira School McEvoy Ranch MCSTOPPP Miller Creek Middle School National Marine Fisheries Service National Park Service National Wildlife Research Center Natural Resources Conservation Service North Bay Dairy Women North Coast Resource Conservation & Development Council North Marin Water District Northbay Woolgrowers Association Novato Charter School Novato Children's Center | <ul style="list-style-type: none"> Novato Enrichment Care Novato Youth Center Old Gallinas Children's Center Pacific Aquaculture Caucus Pacific Coast Shellfish Growers Association Park Elementary School Pickleweed State Preschool Pleasant Valley School Pt. Reyes Lions Club Pt. Reyes National Seashore Redwood Empire Small Business Development Center Regional Water Quality Control Board Richardson Bay Audubon Sanctuary Ross Elementary School San Domenico School San Jose Middle School San Pedro Elementary School SEED Slide Ranch St. Isabella School Saint Mark's School Spaulding Wooden Boat Center, Sausalito Strawberry Point School Sun Valley Elementary School Tamalpais Valley Elementary School The Bay Institute Tomales Bay Agricultural Group Tomales Bay Oyster Company Tomales Bay Shellfish TAC Tomales Bay Watershed Council UC Forest Products Lab UC IHRM Program UC Sea Grant Program UC Small Farm Center USDA Animal and Plant Health Inspection Service USDA Forest Service USDA Risk Management Agency Vallecito Elementary School Venetia Valley Elementary School Veterinary Medicine Teaching and Research Center, Tulare Walker Creek Ranch West Marin Chamber of Commerce Western United Dairymen Willow Creek Academy |
|---|--|---|

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Department Total
427 volunteers donated 28,354 hours.

Master Gardener Program
153 Master Gardener volunteers donated a total of 17,394 hours
Donated Value Equivalent \$382,668

4-H Youth Development Program
274 adult volunteers donated a total of 10,960 hours
Donated Value Equivalent \$241,120

VOLUNTEER CONTRIBUTIONS
To expand our education and outreach we train a cadre of dedicated volunteers.

2007 REPORTS & PUBLICATIONS
A Christmas Tree Growers Guide to Sudden Oak Death - http://ucanr.org/christmas_tree_guide
Amazing But True Facts About Marin County Agriculture - http://ucanr.org/amazing_but_true
Establishing a Cheese-making Facility in Marin County - http://ucanr.org/cheese-making_facility
Organic Olive Manual - http://ucanr.org/organic_olive_manual
Riparian Revegetation Evaluation on California North Coast Ranches - http://ucanr.org/riparian_revew_eval
Spanish Guidelines for Forest Collectors - http://ucanr.org/spanish_guide_forest
Sudden Oak Death Guidelines for Landscapers & Gardeners - http://ucanr.org/landscapers_guidelines

FUNDING SOURCES

Our programs operate through a unique partnership between the County of Marin, the UC system, support from the USDA, and other private funds. Backed by the resources of the UC campuses, our educational programs use practically applied research information to solve community problems. We consult with individuals and organizations, publish newsletters, conduct local applied research, produce information for mass media, and conduct seminars and workshops. For every \$1 the county contributes, other sources contribute \$3.

UCC Cooperative Extension 2006-07
Funding Total \$1,313,896

County, including additional contracts, \$291,979
Federal, \$101,312
University, \$525,355
Grants, \$81,661

STAFF

UC Non-Academic Staff
Cindy Jensen
4-H Program Representative

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Administrative Support

Marin County Staff
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SUSTAINABLE AGRICULTURE PROGRAM

The "Grown in Marin" program helps strengthen the viability and long-term success of agriculture in Marin by assisting farmers and ranchers with business and crop diversification. This program is made possible with the support of the County of Marin and the Marin Board of Supervisors.

Program Coordinator: Steve Quirt

Permitting assistance pays off
County Ag Ombudsman Lisa Bush assisted 13 local producers with permitting and diversification projects on local ranches and farms. A spring training for 30 county and agency staff reinforced the issues and concerns facing producers as they attempt to increase profitability. All of county staff responding indicated that they found the knowledge gained very useful to their work in processing permits for agricultural diversification projects.



Grown in Marin website grows bigger

Summer Intern Anne Kehoe completed a make-over of our Grown in Marin website, adding a new section, "Resources for Farmers," where producers can access more information on all topics covered by the GIM workshop series since its initiation in 2002. GIM postcards are available at various outlets throughout the county, including post offices, libraries, and partner organizations. The website is averaging 20,622 hits monthly.

88% of GIM workshop participants indicate that they plan to apply the methods demonstrated in the workshops to their farming practices. Resources are linked to the <http://growninmarin.org> website by topic.



This site really expresses a commitment to sustainable farming in this area, and we are lucky to have support like that.
- Margie McDonald, Wild Blue Farm

Food service workers on the farm

CE staff partnered with Marin Organic and Novato Unified School District to bring 35 food service staff to an on-the-farm workshop as part of their professional development credits. A "Producers in the Cafeteria" lunch was served to 400 school children at San Pedro School in San Rafael in December. Three local producers attended this event and spoke about their operations and the food the kids were eating for lunch. Both the Marin Organic School Lunch Program and the Food Service Program led by Miguel Villarreal for San Rafael and Novato School Districts expanded. The amount of local food provided by Marin Organic-associated producers doubled from \$16,000 in food orders in 2006, to more than \$35,000 in food orders in 2007.

It takes a village to bring you your food

We participated as a partner in Marin Farmers Markets year-long media campaign to spread the word to Bay Area consumers about eating locally. Brigitte Moran and her staff led the charge producing a full-page spread that ran in *The Marin Independent Journal*, *San Francisco Chronicle*, and other local newspapers.



URBAN HORTICULTURE PROGRAM

The Urban Horticulture Program provides Integrated Pest Management information and education to the professional landscape industry.

Horticulture Advisor: Steven Swain

Clinica bilingue para plantas enfermas

Responding to the need for more plant information in Spanish, summer clinics were held in Novato at Quesada Market for 25 residents. Commercial landscape crews received hands-on training in invasive species class co-hosted with the county Parks and Open Space Department and the Ag Commissioner's office, with underwriting from the Marin Municipal Water District Willis Evans grant program.

A horticulture training program springing forth

We continue our partnering with College of Marin at the IVC campus, the Marin Conservation Corps, and the Workforce Investment Board, and others, to create a hands-on garden learning site for Corps members and others. A \$33,000 grant provided by the county Board of Supervisors for planning consultation is moving the design forward towards groundbreaking.

Marin Master Gardeners talk and walk sustainability message
A total of 1,320 residents attended workshops and clinic events taught by Master Gardener volunteers, while we handled 1,423 walk-or call-ins at our office in Novato, 153 Master Gardener volunteers donated a total of 17,394 hours of education and service to Marin County at farmers' markets, library talks and clinics, weekly Marin IJ columns, and other special events held at key partner organizations like Marin Art & Garden Center and the City of San Rafael's Falkirk Center. Event topics focused on bay-friendly and sustainable horticulture practices.

My landscape company employees appreciate the workshop being covered in their native language and the relevance of the weed control information to our everyday work.
- Eric Rayner, owner, Rayner Landscaping Company

YOUTH DEVELOPMENT PROGRAM

The 4-H Youth Development Program offers Marin youth ages five to teens valuable life skills in leadership, community service, and science.

4-H Advisor: Jane Chin Young

Farm to Fork curriculum takes a bite

We tested a new Farm to Fork curriculum with 60 first graders from San Pedro and Laurel Dell schools as part of a statewide curriculum on raising awareness about local food available on our ranches and farms. FSNEP staff and 76 elementary school teachers and Community Action Marin teachers provided nutrition education about healthy eating habits to 1,084 youth at five low-income elementary schools and eight Community Action Marin centers in Marin.

From hatching chicks to beach clean-up

1,722 Marin youth participated in clubs, summer camps, after school and nutrition groups throughout the county, hatching chicks, prepping school garden plots, leading talks, cleaning up beaches, and experiencing the hands-on learning 4-H is famous for.

Dear Ms. Jensen, Thank you for the eggs and the incubator. Most of our chicks have hatched and it's so much fun to hold them and watch them grow.
- From the Kids in Room C-1, Pleasant Valley School

NATURAL RESOURCES

WATER QUALITY AND WATERSHED PROGRAM

Our watershed management program in Marin focuses on improving the quality of water and aquatic habitat on county ranches and dairies.

Watershed Advisor: David Lewis

Creating a comprehensive monitoring program
Funds for a two-year effort (2007-2009) were awarded UCCE and staff to develop and initiate a comprehensive monitoring program for the Marin Resource Conservation District (MRCD). This will include maintenance, implementation, effectiveness, and validation monitoring for MRCD restoration and conservation projects.

Riparian revegetation evaluation available

UCCE staff completed this analysis on 102 riparian sites in Marin, Sonoma, and Mendocino Counties in 2007. The guidelines are used by area clientele to document positive and negative outcomes from restoration projects, improve revegetation project design, and justify additional funding requests for future work. The project final report and monitoring guidelines are available online, at http://ucanr.org/riparian_revegetation.

Estuary water quality

Microbial contamination of our estuaries and near-shore environments continues to impact the beneficial uses of these waters. The dynamics of pathogen and indicator bacteria transport in Marin and Sonoma County estuaries was monitored in five nearby estuary systems, including Lagunitas and Walker creeks and Estero Americano. Results are being shared with area clientele to improve estuary water quality management and monitoring. The project final report is posted online at http://ucanr.org/estuary_water_quality.

County committee recommends restoration projects

The Marin County Wildlife & Fisheries Committee recommended the Board of Supervisors fund 12 projects totaling \$16,605, focusing on restoration and education about wildlife and fisheries in Marin County. MCSTOPPP also contributed funds for clean water stewardship community grants to this coordinated effort.

The research into the effectiveness of restoration projects that included STRAW has proven to be invaluable in many ways...it has helped to secure funds and expand opportunities for schools to participate in restoration efforts. - John Parodi, Bay Institute

RANGE MANAGEMENT PROGRAM

Range & Livestock Advisor: Stephanie Larson

Doctoral program nets new knowledge

Stephanie returned from her doctoral studies at Oregon State University, Corvallis with her PhD in Rangeland Ecology and Management. Her research focused on animal movement across landscapes, improving ecosystem management with livestock as a tool. She'll be conducting new research trials with the Ag Commissioner's office on weed control and grazing regimes on coastal pasture.

Opportunities for sustainable meat production in Marin and beyond

A feasibility study is under way to determine if the region's markets - supply and demand-side - can support a regional, multi-species (red meat) facility, with a focus on local, sustainably-produced meats. The study is being conducted by the Mendocino County Economic Development and Finance Corporation, UCCE-Mendocino, the UC Small Farms Center, and two consulting firms with expertise in the design of meat processing facilities. The study should be completed by March 2008.

UCCE staff has contributed an exceptional level of knowledge and guidance ... helping us get better organized and more effective at accomplishing our goals. With their continued support, the ranchers in the Point Reyes National Seashore are better able to fulfill the responsibility of managing these public landscapes, continuing each family's heritage as just another beautiful attribute of this national treasure. - David Evans, H Ranch

SUDDEN OAK DEATH COORDINATION

The Sudden Oak Death program provides technical assistance to other counties, agencies, and the public in collaboration with the California Oak Mortality Task Force (COMTF). It focuses on the plant pathogen *Phytophthora ramorum*, which can have devastating effects in the wildlands it inhabits and has had substantial impacts on the nursery industry internationally.

Program Coordinator: Janice Alexander

Oak mortality on the increase

In 14 coastal California counties and Curry County, Oregon, *P. ramorum* has caused outbreaks of Sudden Oak Death, killing over a million native oak and tanoak trees. An ongoing education and outreach program funded by USDA-FS is coordinated from our offices. It serves Marin residents and professionals as well as making expertise and materials available to other affected areas statewide.



Reaching more diverse communities

As the disease has spread to more forested areas within the 14 affected counties in California, the popular forest gatherers guide was translated and adapted to reach more Spanish speaking populations. Guidelines for christmas tree growers and landscapers were also made available at the Task Force website at www.suddenoakdeath.org.

Charting a course for disease management

Staff coordinated conference websites, registration, and presentations for more than 300 attendees in Rohnert Park, Santa Rosa, and Monterey for the 6th California Oak Symposium, the SOD Science Symposium III, and the International Union of Forest Research Organizations.

Ask and you'll find out more

Janice was invited to speak in Marin and many parts of the state, reaching 547 people at 13 talks. In Marin, this included talks at Dominican University, at Point Reyes Seashore staff training, at five homeowner associations, and the EPA Region 9 tribal conference. By request, workshops and training sessions for 320 professionals were held at eight sites in affected counties. Many phone calls were received and answered from Marin and well beyond. Special assistance was provided to Sonoma County. In addition to more than 2,000 requested downloads of hand-outs, print materials and brochures were mailed to groups statewide.

As a tribal person I would like to extend my gratitude to let you know that you have succeeded in what you said you would do. You developed a network for tribes to turn to when they have concerns for a healthy forest. Good job.
- Reno Keoni Franklin, Kasha Pomo Tribe