





# **University of California Cooperative Extension**













Annual Report • Marin County 2002-2003







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#### Master Gardener Program

Pam Hartwell-Herrero President

#### Student Intern

Charise Corda

Agricultural Producers Survey

#### Message from the Director Mission and Goals

The University of California Cooperative Extension in Marin is part of a state-wide 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.

Academic staff are at the forefront of change. Goals include working to preserve agriculture, protecting our environment, helping communities shape wise public policy, and strengthening community development and leadership skills in our youth and adults. In Marin County we are also know as the Farm Advisor's office.

Our programs operate through a unique partnership between county government, 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.

Advisors and staff work with producers, industry representatives, resource agencies, and other interested groups addressing the following topics:

#### Agriculture and Natural Resources, with a special focus on:

- promoting and diversifying Marin agriculture
- environmental protection
- water quality in Marin watersheds
- animal health & welfare

#### **Urban Horticulture**, with a special focus on:

- providing Integrated Pest Management information & education to the landscape industry
- local coordination of Sudden Oak Death information
- volunteer Master Gardeners, providing community service at schools, community gardens, and other public spaces

#### **4-H Youth Development**, with a special focus on:

- providing nutrition and gardening education and curricular materials
- hands on project based learning
- science literacy
- 4-H teen teachers and mentors program



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#### Master Gardener Volunteer Award

Rebecca Landrum, was honored at a Board of Supervisors Volunteers recognition ceremony for her leadership and hard work in organizing the Falkirk greenhouse and gardens renovation project with the City of San Rafael.





#### Volunteer Award

Carol Horick, West Marin rancher, was recognized by the Marin 4-H Council as the 2003 Friend of 4-H recipient at their annual awards program. She was honored for her many years of dedication and service with the livestock show of the West Marin 4-H Fair.



#### **Acknowledgments**

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

Susan Adams – 1<sup>st</sup> District Harold Brown – 2<sup>nd</sup> District Steve Kinsey – 4<sup>th</sup> District Cynthia Murray – 5<sup>th</sup> District Annette Rose – 3<sup>rd</sup> District

#### **Volunteers**

4-H Youth Development Program 198 adult volunteers donated a total of 15,840 hours Donated Value Equivalent \$348,480

Master Gardener Program
214 volunteers donated a total of
14,372 hours
Donated Value Equivalent
\$316,184

Department Total
412 volunteers donated 30,212 hours.

Many thanks for sharing your info on Sudden Oak Death - it is very important that we all become educated as you know.

Carol Preston

Natural Science Curator,

Randall Museum

#### **Funding Sources**

Federal	\$74,613
County	\$216,128
University	\$484,466
Grants	\$309,571
Gifts	\$7,838

Direct funding comes from four primary sources:

Federal	7%
State	$44^{\circ}/_{\circ}$
County	20%
External grants	29%

For every \$1 the county provides, other sources contribute \$4.

Recently my husband and I visited your office with bug questions. Although the news was not good (termites) I wanted to thank you for your professional and courteous behavior. It's nice to know people still care. Thanks again.

Sincerely,

Donna & Derek Holmes, Novato







## Special Event: Pathogens & Water Quality

The third in a series of community forums presented in conjunction with studies being conducted in Tomales Bay. A panel of community members and local and state agencies discussed the impending regulations from the Regional Water Quality Control Board. A total of 60 community members attended.

Advisor: David Lewis Co-sponsor: Tomales Bay Watershed Council, County of Marin



#### Grown in Marin Producers Directory

Our office received funding to produce an on-line directory featuring Marin agricultural products. The website is www.growninmarin.org. It includes information about products grown in Marin and where you can find them; a listing of local farms, farm stays and tours; restaurants that serve local products; and more.

Funding: Marin Community Foundation; Duration: 2002-2004

#### Organic & Sustainable Agriculture Program

This project is designed to strengthen the viability and long-term success of agriculture in Marin by assisting farmers and ranchers with business diversification. The *Grown in Marin* program has several components including a speaker series on crop and farm diversification, a monthly newsletter providing information about new and profitable marketing opportunities, individual field trials assistance, and the production of a web-based directory connecting farmers to consumers.

Funding: Clarence E. Heller Foundation, County of Marin, UC SAREP Program; Duration: 2002-2005

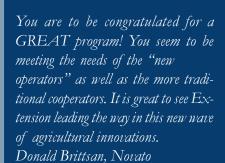


# Implemented in Tomales Bay Serin Personnes Conservation District

**Conservation Practices** 

Marin Resource Conservation District in partnership with UCCE and USDA NRCS was awarded \$357,000 for the implementation of conservation projects in the Tomales Bay Watershed. Selected projects must improve water quality by reducing fecal coliform, nutrients, and sediment entering into the Bay and its tributaries. Applicants must operate a livestock or dairy and provide 25% in matching funds.

Funding: State Water Resources Control Board; Duration: 2003-2005







Thank you for this beautiful website. Our family has contacted some of the farmers and learned where to get the fresh food! Thanks again,

Larry Logan & Family



#### Sudden Oak Death (SOD) Regional Coordination

Staff ecologist Janice Alexander provides regional and county coordination on Sudden Oak Death in close cooperation with the California Oak Mortality Task Force. Last fiscal year over 2,000 Marin residents were provided information about SOD. Janice also assists in local research efforts, acts as a tribal liaison, and provides education materials and assistance to other infested counties.

Funding: California Dept. of Forestry, California Oak Mortality Task Force; Duration: 2001-2003

# Master Gardener IPM and School Garden Outreach Program

Julie Carter and Cathy Sinclair coordinated the Public IPM and School Garden programs funded by MCSTOPPP. Over 21 schools received consulting on how to start, maintain, and integrate their garden into the school curriculum. Information and materials on least toxic alternatives to household and garden pests were provided to almost 2,000 Marin residents at various workshops and special events held throughout the county.

Funding: Marin County Stormwater Pollution Prevention Program (MCSTOPPP); Duration: 1999-2003

Thank you for Bill Bentley's fine article on our Club Garden. His research and integrity in writing are very much appreciated. We thank the Marin County Master Gardeners for the opportunity to share with the community the wonderful story of our gardens' 100th year.

Jean Coleman
Mill Valley Outdoor Art Club







#### Food Stamp Nutrition Education Program

Marin County 4-H is participating in the Youth Food Stamp Nutrition Education Program (FSNEP) through USDA and the California Department of Social Services. This program promotes a healthy lifestyle for youth and their families who receive food stamps. Staff work with school programs to offer nutrition education. At the completion of the federal year, FSNEP had served 908 youth members, 75% of whom were under age 5 and 70% represented by minority groups.

Funding: USDA & California Dept. of Social Services; Duration: 2002-2003

# Special Event: Healthy Food for Growing Kids

A packed audience of over 100 Marin parents, teachers and community members attended the MFSP annual event, listening to author Mollie Katzen discuss nutrition education and the benefits of eating locally. FSNEP staffer Elsa Latini and School Garden Coordinator Cathy Sinclair ran a booth on the FSNEP Nutrition education program and school garden opportunities.

Co-sponsors: Marin Food Systems Project (MFSP), Slide Ranch, and MALT



### Special Event: The Art of Saving Oaks

This art and education exhibition successfully highlighted the value of our oak woodlands and the threat of Sudden Oak Death, while launching a series of similar events throughout California. For the Marin event, we provided input on informational posters, supplied outreach materials, and participated in public presentations and discussions.

Coordinator: Janice Alexander Sponsors: California Oak Foundation, Marin Community Foundation, California Oak Mortality Task Force



Thank you for all your work with the Summer Agricultural Institute for Teachers. It was great to meet you and to listen to you speak. Thank you also for moderating the panel discussion "The Next Generation" that was a fantastic session. Lastly, thank you for steering me in the right direction regarding the 4-H Marin Homeschool Club. Sincere best wishes and thanks again. Ann Ross

#### **Ongoing Research Projects**

**Agricultural Producers Survey:** Ninety-five or 51% of Marin agricultural landowners were surveyed to assess their current practices and to determine needs and trends. Marin ranchers want to keep their land, maintain it in agriculture and continue farming themselves. There is strong interest in the adoption of organic practices and integration of value-added products into the farm plan. The report can be downloaded at http://cemarin.ucdavis.edu.

Advisor: Ellie Rilla, Steve Quirt, and Student Intern Charisse Corda; Cooperators: Marin agricultural producers; Fundor: Marin Community Foundation

**Native Oyster Restoration:** Oyster shell bags and native olympia oysters are being outplanted in Tomales Bay as part of a multi-year research project to restore oyster populations and improve the overall ecology of bay plant and animal communities.

Advisor: Paul Olin; Cooperators: Hog Island Oyster Company, UC Davis, Romberg Tiburon Center; Fundors: NOAA Community Restoration Program, National Marine Fisheries Service.

**Phosphonate Effectiveness for SOD Prevention:** Phosphonate compounds have recently been shown to effectively prevent and slow infections by *P. ramorum* in oaks. Field studies of 30 trees in natural forest settings continue with funding from the USDA Forest Service. The team is monitoring each tree's health.

Advisor: Pavel Svihra; Cooperators: Dr. Matteo Garbelotto, Extension Specialist & Adjunct Professor at UC Berkeley, Marin County Open Space District

Phytophthora ramorum Infection Rate and Symptom Progression in a Natural Forest: A team of UC Berkeley researchers are studying the role of beetles in the deaths of SOD-infected trees. Sites are located on Marin Open Space District lands with funding for the field research provided by the California Dept. of Forestry.

Advisor: Pavel Svihra; Cooperators: Drs. Dave Wood and Brice McPherson at UC Berkeley

**Tomales Bay Water Quality Project:** This 4 year study monitored water quality for pathogens, nutrients, and sediment at 10 cooperating dairy and beef operations in the Tomales Bay watershed. Project team members are working closely with the Tomales Bay Agricultural Group to identify and reduce sources of potential surface water pollution within animal agriculture operations. This work is being shared with the larger watershed community and has contributed to the successful efforts of the Marin Resource Conservation District and the County of Marin to capture financial and technical assistance specifically for implementing water quality improving measures.

Advisor: David Lewis; Cooperators: Extension Specialists Drs. Robert Atwill & Kenneth Tate, Tomales Bay Agricultural Producers Group; Fundors: Marin Community Foundation, UCD Dairy workgroup, CA Sea Grant

#### Conferences, Workshops & Tours

**2003 Marin Master Gardener Training:** Master Gardeners coordinated this 16-week course on horticulture for 35 selected Marin residents. Class graduates become interns and provide at least 50 hours of community service at the office desk and in the community.

Coordinators: Glenn Smith & Cathy Teague

**Dairy Day:** Dairy operators attended a day-long workshop on reproduction and nutrition in dairy cows with speakers from UC Davis and local large animal veterinarians.

Advisor: Stephanie Larson

**Ecology Badge Workshop:** Over 90 Girl Scouts from troops in Marin and the Bay Area attended a fun handson workshop to earn their earth connections badge. They learned about Sudden Oak Death and local ecology. *Advisor: Janice Alexander; Co-sponsor: The Art of Saving Oaks, Girl Scouts of San Francisco and Marin* 

Farm Day: Over 2,000 Marin schoolchildren ages 4-10 attend this annual educational event in March at the county exhibit hall where live animal and interactive exhibits teach about the heritage and diversity of Marin agriculture. Awards are given for the best essays and murals.

Coordinator: Jane Chin Young, Farm Day Planning Committee; Co-sponsors: Marin County Office of Education, Farm Bureau, MALT, Marin Farmers Market, Marin County Fair & Exposition, Marin Center, 4-H Council, Corte Madera-Sausalito Farmers Market

**Grown in Marin Speakers Series:** Semi monthly workshops in Pt. Reyes for Marin farmers and ranchers, with

expert panels on value-added and crop diversification. Coordinator: Steve Quirt, Ellie Rilla; Co-sponsors: Marin Organic, Marin Agricultural Land Trust; Funding: Clarence E. Heller Foundation, UC SAREP

#### IPM in the Winter: Coping with Pests & Diseases:

Daylong training was provided to 147 arborists and landscapers in June on sampling, recognition and quarantine compliance for Sudden Oak Death. The course fulfilled CA Dept. of Food & Agriculture requirements to certify arborists and landscapers as non-regulatory Sudden Oak Death samplers.

Advisor: Pavel Svihra; Co-sponsors: Marin Agricultural Commissioners Office

**Riparian Resources Workshop:** A two-day workshop for 50 participants, including classroom and site visits, held at Walker Creek Ranch for local landowners and agency staff on riparian buffers.

Advisors: Stephanie Larson & David Lewis

Water Quality Workshops: Several local workshops were held for producers on riparian pastures and grazing management, water development off stream, solar pumps, and funding opportunities for improving grazing practices.

Advisor: Stephanie Larson

Weeds, Grazing and Economics: Participants met for a day-long workshop in Pt Reyes on weed management and grazing strategies.

Advisor: Stephanie Larson & Tony Nelson; Co-sponsor: Marin Agricultural Land Trust

#### 4-H Program Events

4-H reached over 4,000 people through organized clubs and groups, collaborative events, and fairs. 198 adult volunteer leaders donated 15,840 hours of service. With an enrollment of 1,364 youth members, community clubs provided learning and growth opportunities through community service and leadership programs. Almost 1,500 more youth in schools and youth centers participated in special interest projects in embryology, environmental education, and gardening.

Advisor: Jane Chin Young, Cindy Jensen & 4-H Staff; Cooperators: Marin 4-H Council 4-H volunteer leaders, community organizations



Just a little note to thank you for all that you do for our providers and families. Juanita Milburn, Program Manager Family Child Care Network, Marin Community Child Development Programs 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.

American Academy of Pediatrics Bahia Vista Elementary Bayside Elementary Bodega Marine Laboratory, UC Davis Bolinas-Stinson Resource Recovery Project Brookside Upper and Lower Campus California Aquaculture Association California Department of Fish and Game California Department of Food and 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 College of Marin Community Alliance with Family Farmers Department of Agronomy & Range Department of Community Development, UC Davis Department of Conservation & Natural 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 Edna Maguire Elementary Environmental Education Council of Marin Fairfax/San Anselmo Children's Center FireSafe Marin Gallinas Elementary Hamilton Child Development Center Hog Island Oyster Company International Society of Arboriculture, Western Chapter Lagunitas School District

Laurel Dell Elementary Lu Sutton School Manzanita Child Care Development Center Marin Academic Center Marin Agricultural Education Alliance Marin Agricultural Land Trust Marin Art and Garden Center Marin Community Child Development Marin Conservation League Marin County Farm Bureau Marin County Libraries Marin County Wildlife & Fisheries Committee Marin Farmers Market Marin Food Policy Council Marin Grape Growers Association Marin Learning Center Marin Municipal Water District Marin Organic Marin ReLeaf Mary E. Silveira School **MCSTOPPP** Miller Creek School National Marine Fisheries Service National Wildlife Research Center Natural Resources Conservation North Marin Water District

North Marin Water District
Northbay Woolgrowers Association
Novato Charter School
Novato Children's Center
Novato Enrichment Care
Novato High School
Novato Youth Center
Old Gallinas Children's Center
Pacific Aquaculture Caucus
Pacific Coast Shellfish Growers
Association

Park Elementary
Parks, Open Space and Cultural Services
Pickleweed State Preschool
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
San Dominico
San Jose Middle School
San Pedro School
SEED

SEED
Slide Ranch
St. Isabella School
St. Marks School
Strawberry Pt. School
Sun Valley Elementary
Tam Valley Elementary
Terra Linda High School
The Bay Institute
Tomales Bay Agricultural Group
Tomales Bay Oyster Company
Tomales Bay Watershed Council
UC Forest Products Lab
UC IHRM Program
UC Small Farm Center

Region
Vallicito School
Veterinary Medicine Teaching and
Research Center, Tulare
Walker Creek Ranch
West Marin Chamber of Commerce
Western United Dairymen

USDA Forest Service, Pacific Northwest



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