



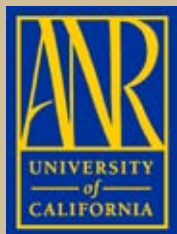
Annual Report

2006-2007



University of California
**Small Farm
Program**

Serving
California's
small-scale
farmers



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On the Cover

A group of California Farm Conference attendees explored UC Santa Cruz Farm and Arboretum as part of the 2007 event's Mediterranean Tour. Photo credit: Marita Cantwell.

Introduction

2006-2007

... was a year of transition for the University of California Small Farm Program. Dr. Desmond Jolly retired in August 2006 after 11 years of outstanding service to the program and the university.

I served as interim director during most of the fiscal year and aimed to keep the program's research and extension activities on target. We

were successful in the recruitment of the new permanent director, Dr. Shermain Hardesty, who joined the program July 1, 2007.

During this year, the Small Farm Program pushed ahead with special projects including new efforts at translating recent SFP publications and reaching additional non-English-speaking farmers, renewed outreach on food



Dr. Marita Cantwell

safety and postharvest handling, continued research on the growing blueberry market in California, and new research on other berry crops and specialty vegetable crops. These efforts were accomplished by the very capable staff at the Small Farm Center in Davis, as well as the Small Farm Program's core advisors and their assistants, based in six counties around the state.

The Small Farm Program's daily work—farm visits with small-scale producers, work on field research projects, workshops for new farming audiences on perennial topics of interest, and informing the general public as experts on small farm issues—is nearly impossible to quantify. But I and the Small Farm Program staff hope this report will serve to highlight some of the many accomplishments of the Small Farm Program during the past year. It was a pleasure and honor to serve the program during the transition period.

- Dr. Marita Cantwell, Interim Director
August 2006-June 2007



"The Small Farm Program (and its supporters) have taken pride in being early adopters of innovative, cutting edge themes and topics related to the sustainability of agriculture."

- Strategic Plan for
The University of
California's Small Farm
Program, June 2006

Looking ahead ...

The Small Farm Program's new director, Dr. Shermain Hardesty formally took the reins on the first day of the 2007-2008 fiscal year.

Though this Annual Report includes accounts of this past year—prior to Hardesty's appointment—future accomplishments will be informed by last year's successes and by the program's new leadership. Hardesty brings to the Small Farm Program a background in agricultural economics, with current projects in direct marketing and agricultural cooperatives.

Keep up with the Small Farm Program's latest advances by visiting www.sfc.ucdavis.edu.



Dr. Shermain Hardesty

Who we are



Staff members at the Small Farm Center

Small Farm Center

Small Farm Center staff members, located at UC Davis, perform key functions including coordinating program efforts, taking the lead in new initiatives, seeking grants, and acting as a liaison for stakeholders.

Linda Vieira
Office Manager
Manages SFP finances, performs human resources duties, oversees daily office operations

Kristin Reynolds
Program Representative
Represents SFP at events, researches emerging agricultural issues, provides program support

Birgit Hempel
Administrative Assistant
Answers requests for information and publications, maintains SFC library files, updates SFC databases

Brenda Dawson
Communications Coordinator
Updates SFC web site, coordinates publications, promotes the statewide program

Fernando Gonzalez
Spanish Translator
Translates publications, assists in office organization

Joanne Zhao
Student Assistant
Translates publications

Small Farm advisors

The Program's Small Farm advisors are located in University of California Cooperative Extension offices in counties throughout the state. These advisors focus their efforts on serving small-scale farmers and ranchers with a variety of programs that address local needs.

Advisors keep the program on its feet and in the field through research, educational outreach and on-farm consultation.



Benny Fauché,
San Joaquin County



Richard Molinar,
Fresno County



Aziz Baameur,
Santa Clara, Santa Cruz &
San Benito Counties



Manuel Jimenez,
Tulare County



Mark Gaskell,
Santa Barbara County



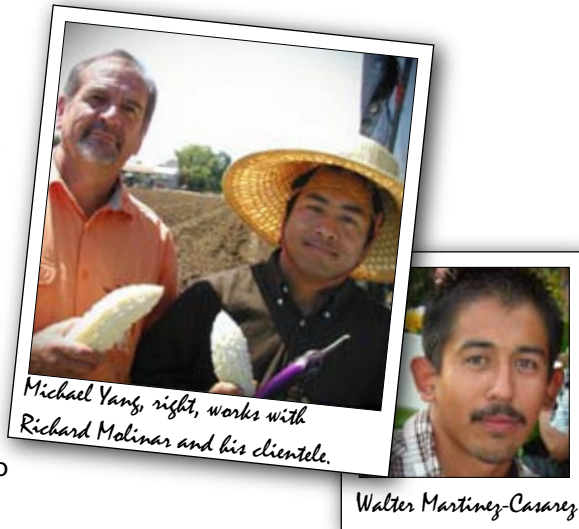
Ramiro Lobo,
San Diego County

Small Farm support staff

The Small Farm Program also employs a few select staff members at the county level who work closely with Small Farm advisors. These include:

Michael Yang
Program Representative
Fresno County
Assists Southeast Asian farmers, translates presentations and publications, coordinates radio program, assists in research

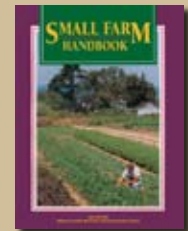
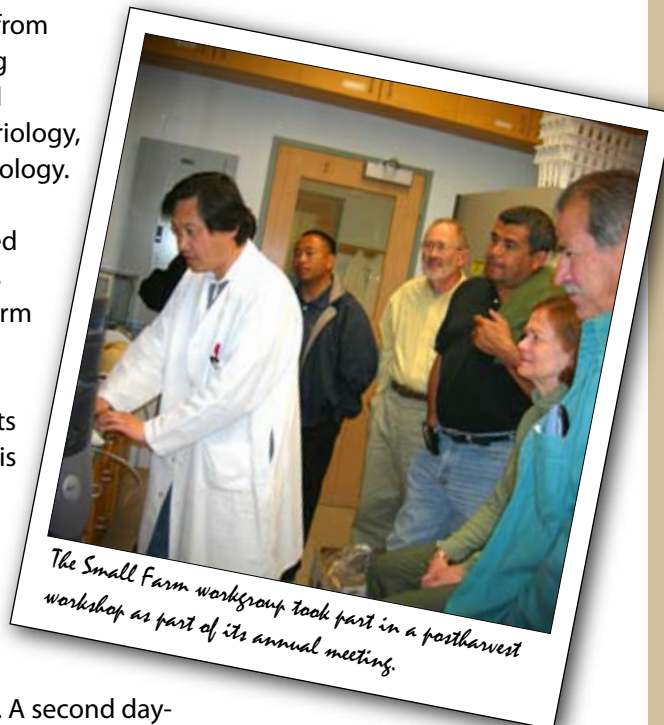
Walter Martinez-Casarez
Field Assistant
Tulare County
Helps conduct field research, creates digital histories for Bravo Lake Botanical Gardens



Small Farm workgroup

The UC Small Farm workgroup facilitates communication among farm advisors, specialists and others with an interest in issues pertinent to small-scale farming. Workgroup members hail from a wide array of disciplines, including agronomy, horticulture, agricultural economics, food technology, bacteriology, postharvest physiology, and entomology. The group helps identify emerging challenges and opportunities related to small-scale farming and provides leadership and support for Small Farm Program initiatives.

In 2006-2007, the workgroup held its annual meeting in March at UC Davis for a day-long discussion including presentations on outreach methods for small farms, farm management workshops, and trends in the produce market, as well as field research on maracuyá, pitahaya and blueberry production. A second day-long workshop was held regarding postharvest quality and food safety as an informative training opportunity for farm advisors. Held at Mann Laboratory on the UC Davis campus, topics of the day included the GAP system, temperature management, and microbial food safety.



This year, the workgroup began a complete revision of the Small Farm Handbook, last published in 1994. Spearheaded by Laura Tourte and Ben Faber, the multi-author, 200-page manual is planned for completion in early 2008.

Our clients

Who is a 'small' farmer?

One of the distinctions of the UC Small Farm Program is the diversity of its clientele. California's small-scale farmers include men and women with varying degrees of educational experience and an array of ethnic and cultural backgrounds.

In the 2006 revision of its strategic plan, the Small Farm Program identified three emerging factors in California's demographic trends that will likely create new demands for research and information. Included in them was an aging population creating an increase in demand for agricultural products with direct health

benefits; ethnic groups reaching critical market mass, generating demand for specialty crops with more ethnically diverse producers; and an increase in disposable income for one segment of the population coupled with a wider change in value preferences that has led to greater popularity of local and organic products, specialty products, and direct marketing channels.

To the USDA, a small farm is one that sells between \$1,000 and \$250,000 worth of agricultural products in a year. In the USDA's 2002 Census of Agriculture, nearly 85 percent of California's 79,631 farms generated annual sales of less than \$250,000.

Diversity among California farm operators:

- 112,321 White
- 11,985 of Spanish, Hispanic or Latino origin
- 5,379 Asian
- 1,560 American Indian or Alaska native
- 899 more than one race
- 388 Black or African American

- USDA Census of Agriculture, 2002

The plan also noted an increase in second-career and part-time farmers entering the agricultural field. According to the 2002 Census of Agriculture, approximately 38 percent of California's primary farm operators report having a primary occupation other than farming.

Women in agriculture

Working with women in the field

As part of its focus on underserved producers, the Small Farm Program also makes an effort to reach female farmers.

This year Kristin Reynolds, program representative, made progress in ongoing "women in agriculture" outreach projects. Participants at both the California Farm Conference and Ecological Farming Association Conference were asked to respond to a survey gauging potential interest in various topics and formats for future presentations aimed at women farmers and ranchers. The overall response from the survey has led to plans for a short course or series of workshops at the 2008 California Farm Conference, with possible expansion in future years.

Work has also continued this year on a risk management curriculum geared for women farm operators. A section titled "Personal Risk Management in Agriculture" is currently in the edit and design phase of publication. The curriculum includes text and worksheets designed to better enable women farmers and ranchers to set goals, identify challenges, and respond to family-farm issues.

There are 35,507 women farmers in California, according to the USDA 2002 Census of Agriculture.



Women farmers in California participate in all aspects of production.

In many languages

A priority among the Small Farm Program's outreach efforts is reaching underserved farming populations with useful information and pertinent research. To that end, the Small Farm Program has made efforts to become multilingual, reaching out to California's diverse agricultural communities where English is not necessarily the primary language.

This year, Small Farm Center staff began work to translate food safety and risk management publications into Spanish and traditional Chinese. Fernando Gonzalez, senior clerk, translated multiple documents into Spanish which are currently undergoing peer review before publication.

Joanne Zhao, student assistant, translated many of the same documents into traditional Chinese. Her translation of *Food Safety at Farmers Markets and Agritourism Venues* was distributed to ethnic Chinese growers at a San Jose meeting focused on food safety. The workshop was just one of a series of workshops on postharvest quality, water quality, and pesticide management designed for Chinese growers, organized by Small Farm advisor Aziz Baameur.

在多種語言裡

In addition to employing myriad languages, Small Farm advisors have sought culturally appropriate avenues of communication with farmers and farm workers. Michael Yang and Richard Molinar have found success among the Hmong community in and around Fresno County through a one-hour radio program every other Monday evening on KQEQ, a local Hmong-American radio station. In Tulare County, Manuel Jimenez reaches many of his small-scale Hispanic clients through a 30-minute Spanish broadcast he hosts on KGST, where he discusses topics such as specialty crop research and responds to listeners' questions.

Nearly every event held by the Small Farm Program has the option of translation, but some events are held primarily in a language other than English. In November, Richard Molinar and Manuel Jimenez organized the *Conferencia para Agricultores* in Fresno County, which also included a presentation by Benny Fouché. Topics presented to the 42 Spanish-speaking attendees at the conference included information on pesticide safety, weed management, and specialty crops.

En muchos idiomas

And while Small Farm advisors' primary interests lie in California, many of them have conducted small farm-related business on international soils this year. Benny Fouché returned to California in September after a six-month sabbatical in Ecuador where he advised small farmers on avocado and broccoli production and market development. Manuel Jimenez met with a group of small farmers in Mexico to discuss blueberry production in the Los Reyes valley. Ramiro Lobo also visited Honduras to explore a pitahaya trial underway at *Universidad Nacional de Agricultura*.

As one of the nation's leading small farm programs, the UC Small Farm Program has also played host to researchers from throughout the world. In November Kristin Reynolds, program representative, met with a group of Belarussian delegates interested in using SFP projects as models. Participants at this year's events have included agricultural professionals from as far away as Chile, South Africa, and Australia.

Multilingual outreach



Advisor Aziz Baameur works with ethnic Chinese growers.



Advisor Ramiro Lobo works with many Spanish-speaking clients.



Michael Yang, program representative, speaks over Hmong-American radio.

Specialty crops

Blueberries have their day in the sun

If there's one specialty crop that has California farmers abuzz, it's blueberries. Previously considered an Oregon crop on the West Coast, blueberries are being grown profitably in warmer California climates—and for early market windows—in an array of highbush varieties.

The Small Farm Program helped lead the way into California bushberry production, and has continued its focus this year with berry field research and outreach to interested farmers.

Among our farm advisors working with berries is Mark Gaskell, in Santa Barbara and San Luis Obispo counties. He has been studying a wide range of blueberry varieties, as well as raspberry, blackberry, currant, and gooseberry plants. He also hosted a Blueberry Field Day at trial plots in San Luis Obispo and shared his most recent set of data on blueberry planting density with farmers at other blueberry events.

The Blueberry Field Day at Kearney Agricultural Research and Extension Center held May 2007 drew more than 200 farmers, researchers, and industry representatives to explore trial plots, taste blueberries, and gather the latest information. The day was organized by Manuel Jimenez, Small Farm advisor for Tulare County, who completed a series of blueberry studies in concert with fellow Small Farm advisor Richard Molinar—examining everything from initial plant size to mulch options.

Testing blueberries under organic management is Small Farm advisor Aziz Baameur, in partnership with fellow advisor Mark Bolda and the Center for Agroecology and Sustainable Food Systems at UC Santa Cruz. After losing the 2006 harvest to bird predation, the team recently harvested the 2007 crop, which will provide the first data set for this trial.

Though much of the California blueberry boom was started to take advantage of market windows, some farm advisors are cooling on their recommendations of the high-maintenance crop to small-scale farmers. As Benny Fouché, Small Farm advisor for San Joaquin County, recently noted in a presentation, growers who wait until much of the risk of planting this new crop is gone, may find themselves in a market saturated with berries from larger-scale productions: "Not much risk, not much profit."



Blueberry Field Day participant Mike Nelson picks a berry for tasting.



Southern Highbush blueberry varieties have found success in California.

Specialty crops

Advisors explore new crops and test varieties

Long an essential part of the Small Farm Program, specialty crops research this year has touched on a wide variety of products—from exploring the possibility of commercial dragon fruit production to conducting annual variety tests of bell peppers.

Small farm advisors conduct field research on crops new to California that literally helps break ground in domestic production of fruits often imported directly to specialty and ethnic markets. Ramiro Lobo, Small Farm advisor for San Diego County, has focused efforts this year on the pitahaya, or dragon fruit—a cactus fruit with custard-like pink or white flesh grown mostly in Central America and Southeast Asia.

The Specialty Crops event included tomato, strawberry, cherry, longan, mango, jujube, lemongrass, and vegetable plants.

Small Farm advisors Manuel Jimenez and Richard Molinar hosted a Specialty Crops and Squash Field Day at the Kearney Research and Extension Center in November, with a focus on papaya and guava trees grown in hoop-houses as well as virus-tolerant summer squash. Participants also had a chance to view field demonstrations in plots of tomato, strawberry, cherry, longan, mango, jujube, lemongrass, and specialty vegetables.

Advisors sometimes also operate trials at the prompting of local small farmers who raise questions about methods of production. At the request of a small-scale Hispanic organic grower, Small Farm advisor Aziz Baameur started his trial on artichokes and the application of gibberellic acid for earlier and greater yield.

The advisors also participate in ongoing studies of products that have broad, established consumer bases, but are frequently grown on diversified or small-scale farms in California. For example, Benny Fouché conducted variety tests of strawberries and of peppers in San Joaquin County to help small-scale farmers—who may not each be able to fund a personal test plot—decide which new varieties might flourish in the region.

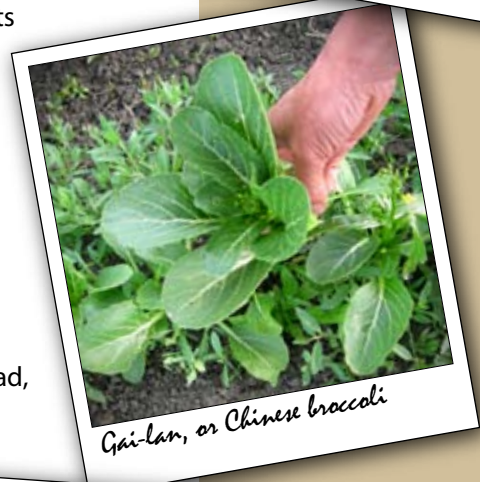
On the central coast, Baameur and fellow advisor Maria Giovanni have conducted tests of a rainbow array of colored carrot varieties and followed up with tasting panels to evaluate consumer reaction to such varieties. Small-scale farmers who take a chance with a new product or production technique are able to minimize their risk with these types of trials conducted with the cooperation of the Small Farm Program.



Artichokes in bloom



Pitahaya, or dragon fruit



Gai-lan, or Chinese broccoli



Miniature, seedless watermelons

Hundreds attend classes on food safety, handling

Food safety, pesticide safety, and safer alternatives to chemical pesticides are perennial topics for Small Farm Program seminars, consultations, and training sessions. In 2006-2007 alone, Small Farm advisors reported more than 1,000 participants in meetings discussing postharvest handling, food safety, pesticide management, and related topics.

After Food and Drug Administration reports in September 2006 of an outbreak of E.coli 0157:H7 in bagged spinach, the topic of food safety became headline news to the general public. Already a leader in promoting principles of food safety, the Small Farm Program redoubled its efforts to educate farmers on this important topic. Small Farm advisor Richard Molinar of Fresno County was instrumental in planning a multi-agency Food Safety Forum. The half-day event was held in November 2006 and was sponsored by the Small Farm Program, the Farm Bureau, the Fresno County Agricultural Commissioner's office, and UC Cooperative Extension. More than 75 farmers participated, with expert speakers including Marita Cantwell, SFP interim director, in addition to other UCCE food safety specialists.



The Food Safety Forum, held November in Fresno County, addressed issues in the wake of an E.coli outbreak.

"We have invited experts to speak to our local agricultural community because of the current focus on challenges related to food safety."

- Richard Molinar,
Small Farm advisor,
in *Western Farm Press*

The Small Farm Program persists in meeting the ongoing challenge of distributing food safety information to a wider and more diverse audience of growers and farm workers. This year, Molinar and Michael Yang, SFP program representative, also organized a workshop on rodent control and postharvest cooling aimed at an audience of Southeast Asian American farmers. Small Farm advisor Manuel Jimenez organized two days of pesticide safety meetings in November that saw more than 900 participants—more than 700 of whom were Spanish-speaking. A pesticide management course was also presented to Chinese growers in San Jose, under the leadership of Small Farm advisor Aziz Baameur and with additional presentations by Small Farm advisor Benny Fouché.

The Small Farm Center and Small Farm advisors continue to disseminate information previously developed, including pesticide safety information in English, Spanish, Hmong, Korean, and Tongan. Pesticide safety and food safety information is also available online at the Small Farm Center site, www.sfc.ucdavis.edu.



Benny Fouché shows attendees at a Going Organic field meeting in May the most effective way to use a hoe.

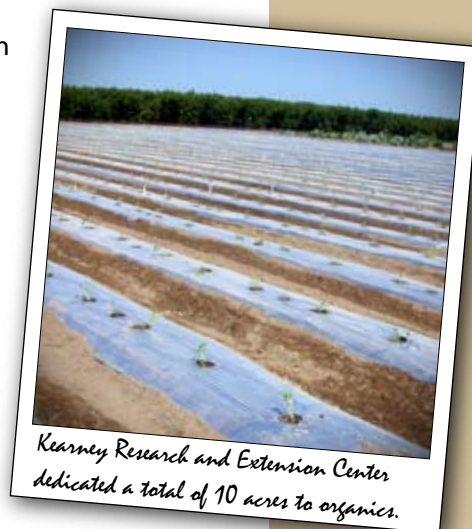
Advisors pursue advances in organic production

Organic production was once almost solely practiced by small-scale farmers. While the organic agriculture industry has grown in size and value, approximately 88 percent of California's registered organic growers each generated fewer than \$250,000 in sales for 2005—the USDA's earmark of a "small" farm.

This year marked a milestone in University of California organic agriculture research, when 9 acres at the UC Kearney Research and Extension Center were dedicated to becoming organic ground. Small Farm advisor Richard Molinar was instrumental in advocating for the organic space, three years after he and Michael Yang began using organic production methods on a 1-acre plot at Kearney dedicated to specialty crops research. Although not the only organic research in the UC system, the total of 10 acres at Kearney is the first land dedicated to organic research among UC Research and Extension Centers.

Many SFP advisors also conduct field research utilizing organic methods to grow crops. Part of Small Farm advisor Mark Gaskell's blueberry research, for example, is focused on organic blueberries, including a planting density trial on a certified organic farm. Gaskell also focuses on the special marketing needs of organic blueberry farmers, studying market price trends and tracking the prices growers get, since little to no data is otherwise recorded regarding organic blueberry price histories.

Small Farm advisor Benny Fouché is a member of the Going Organic management team, which helps connect growers interested in converting to organic production with experienced mentors. He also gave presentations on weed control to local meetings of California Certified Organic Farms.



Kearney Research and Extension Center dedicated a total of 10 acres to organics.

Urban agriculture

Farmers in and around cities get closer look

Agriculture in urban and peri-urban areas is taking on new forms, and as agriculture evolves, so do university extension programs. Though not a formal focus of the Small Farm Program, the topic of urban agriculture has garnered interest from SFP professionals.

Kristin Reynolds, program representative, organized a tour of urban agricultural sites for Small Farm workgroup members in September. Tour stops included a variety of marketing and urban production operations, as well as a meeting with representatives from inner city farmers markets, as the first step in assessing urban agricultural issues that may be addressed by the workgroup.

Reynolds also co-facilitated a workshop about integrating sustainable agriculture and public health for urban areas at a meeting of Bay Area nutritional organizations (BANPAC and BARNN).



Small Farm workgroup members tour City Slicker Farms' urban site.

A closer look at urban and peri-urban agricultural producers is the focus of a project developed over the year by Reynolds. Her research will focus on interviews with 50 farmers and gardeners in Alameda County.

Agritourism

Staff spearheads update of CalAgTour.org data

The Small Farm Program maintains the statewide agritourism database CalAgTour.org and continues to be integrally involved with the Agriculture and Nature Tourism workgroup. This year, Small Farm Center staff contacted every agritourism operator listed in the database to update each location's information.

Agritourism continues to be a topic of interest to the Small Farm Program. The Small Farm Center serves as a central clearinghouse for media and publicity inquiries into agritourism. Several news articles were published this year regarding agritourism that used Small Farm Center staff or CalAgTour.org as references.

Also part of the Small Farm Program's ongoing support of agritourism is its sponsorship of the Fresno County Fruit Trail Map, which includes locations to buy direct from strawberry growers, including many Hmong and Mien producers.

SFP awards go to advisor and small-scale farmer

Each year the Small Farm Program honors an educator and a farmer with the Pedro Ilic Awards, named for one of the original Small Farm advisors who worked with small-scale vegetable growers with limited resources.

The 2007 Pedro Ilic Awards were presented to Fresno County farmer Tchieng Fong and Santa Barbara Small Farm advisor Mark Gaskell at the California Farm Conference.



Farmer Tchieng Fong accepts the Pedro Ilic Award from Marita Cantwell.



Pedro Ilic Award winner Mark Gaskell, left, is congratulated by Richard Molinar.

Small Farm Conference brings farmers together

The Small Farm Program plays a considerable role in partnering with the California Small Farm Conference to produce the state's premier gathering of small-scale farmers and their supporters.

More than 400 registrants attended the 2007 conference, which was themed "The Time is Ripe," to reflect the diversity of issues facing small-scale farmers today. Small Farm advisors helped lead and organize workshops and short courses—including sessions on blueberry production with Mark Gaskell, Benny Fouché and Aziz Baameur; specialty crops with Mark Gaskell; season extension with Manuel Jimenez; and demographics of California farmers with Richard Molinar. Marita Cantwell, interim director, also served on the conference's executive and planning committees throughout the year.



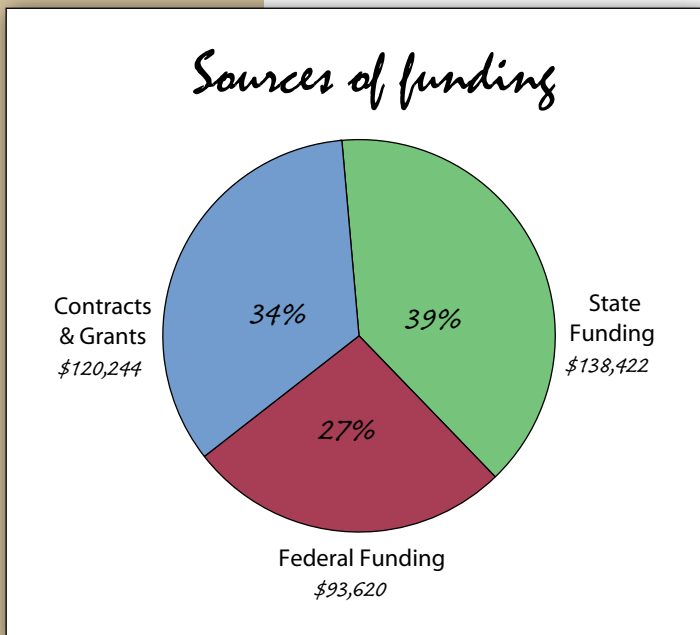
Birgit Hempel, administrative assistant, greets a visitor at an SFP conference display.

The conference also played host to the program's Pedro Ilic Awards, which were presented during the three-day event in Monterey.

2006-2007 Budget

Income

State General Funds	\$ 138,422
Federal General Smith Lever	59,844
Federal Part-Time Farmers	24,526
Federal Mail Allocation	9,250
Carryover of Funds	11,167
Total Income	\$ 243,209



Expenses

Director and Staff Salaries	\$ 123,198
General Assistance and Benefits	9,183
Operating Expenses	26,491
Mail Expense	9,765
Equipment	4,730
Travel	4,427
Carryover of funds to FY 2007-2008	65,415
Total Expenses	\$ 243,209

Continuing Multi-Year Extramural Contracts and Grants*

2001-2006	Ag Health and Safety (Pesticide Safety)	\$ 98,909
2004-2006	USDA Risk Management Outreach to Women	100,008
2003-2007	USDA/CSREES 2501 Project	298,744
2006-2009	USDA/CSREES 2501	298,712
2006-2007	USDA/Risk Management Limited Resource	165,000
Total multi-year funds		\$ 961,373

*These figures do not reflect amounts available during this report period. Dollar amounts reflect the original total for each multi-year grant.

Directory

Center

185 DANR Building
One Shields Ave.
Davis, CA 95616
(530) 752-8136
Fax (530) 752-7716
www.sfc.ucdavis.edu
sfcenter@ucdavis.edu

Shermain Hardesty
(530) 752-7774
sfpdirector@ucdavis.edu

Linda Vieira
(530) 752-7717
lmvieira@ucdavis.edu

Birgit Hempel
(530) 752-8136
bmhempel@ucdavis.edu

Kristin Reynolds
(530) 752-7779
kareynolds@ucdavis.edu

Brenda Dawson
(530) 752-7849
bldawson@ucdavis.edu

Advisors

Aziz Baameur
Santa Clara, Santa Cruz,
& San Benito Counties
(408) 282-3127
azbaameur@ucdavis.edu

Mark Gaskell
Santa Barbara & San Luis
Obispo Counties
(805) 934-6240
mlgaskell@ucdavis.edu

Manuel Jimenez
Tulare County
(559) 685-3309
mjjimenez@ucdavis.edu

Ramiro Lobo
San Diego County
(760) 752-4716
relobo@ucdavis.edu

Richard Molinar
Fresno County
(559) 456-7555
rhmolinar@ucdavis.edu



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Vision

We are guided and motivated by a vision of a thriving, viable California agriculture that has a diversity of small- and moderate-scale farms that remain profitable, enhance the environment, enrich our culture, and improve the quality of life for both producers and consumers.

Our mission is to promote such a community by conducting applied research and outreach programs for the successful adoption, management and marketing of potentially profitable crops and enterprises

As a premier land grant university small farm program, **our goal** is to continue improving our areas of expertise, expanding our range of competence and focus, and serving our various stakeholders—farmers, marketing managers, the University, the USDA and policymakers, our staff and other educators and researchers—through our applied research and education programs.

