

UC Santa Cruz

Teaching Direct Marketing and Small Farm Viability

Title

Teaching Direct Marketing and Small Farm Viability: Resources for Instructors, 2nd Edition.  
Introduction.

Permalink

<https://escholarship.org/uc/item/66r0v248>

ISBN

978-0-9828781-1-8

Publication Date

2015-04-03

Peer reviewed

UCSC Farm & Garden Apprenticeship

University of California, Santa Cruz

# Teaching Direct Marketing & Small Farm Viability

RESOURCES *for* INSTRUCTORS



Edited by Jan Perez, Martha Brown, and Albie Miles



A COMPANION VOLUME TO  
*Teaching Organic Farming & Gardening*  
2ND EDITION *Revised & Expanded*

CASFS

The CENTER for AGROECOLOGY  
& SUSTAINABLE FOOD SYSTEMS

The Center for Agroecology & Sustainable Food Systems is a research, education, and public service program located at the University of California, Santa Cruz. The Center's mission is to advance sustainable food and agricultural systems that are environmentally sound, economically viable, socially responsible, nonexploitative, and that serve as a foundation for future generations.

For ordering information contact:

CASFS  
1156 High St.  
UC Santa Cruz  
Santa Cruz, California 95064  
831.459-3240, [casfs@ucsc.edu](mailto:casfs@ucsc.edu)  
[casfs.ucsc.edu/about/publications](http://casfs.ucsc.edu/about/publications)

ISBN 978-0-9828781-1-8  
©2015 Center for Agroecology & Sustainable Food Systems  
University of California, Santa Cruz  
Santa Cruz, California  
[casfs.ucsc.edu](http://casfs.ucsc.edu)  
First edition published 2005

Cover photo credits, clockwise from top left: Blue House Farm; Jon Kersey; Shauna Casey; CASFS collection; Abigail Huetter. Title page, lower right: Brandon Blackburn.

No endorsement of names or suppliers is intended, nor is criticism implied of similar products or suppliers that are not mentioned or illustrated.

# Table of Contents

Preface and Acknowledgments	v
Contributors and Reviewers	vii
How To Use This Resource	ix
About CASFS and the Farm & Garden Apprenticeship	xii
<b>Unit 1.0 Small Farm Economic Viability</b>	<b>1</b>
<b>Unit 2.0 Overview of Produce Marketing</b>	<b>25</b>
<b>Unit 3.0 Community Supported Agriculture (CSA)</b>	<b>43</b>
Unit 3.0 Introduction to Community Supported Agriculture	45
Unit 3.1 CSA History	57
Unit 3.2 CSA Structure and Organization	69
Unit 3.3 CSA Outreach	77
Unit 3.4 CSA Administration	109
Unit 3.5 CSA Crop Planning	117
Unit 3.6 CSA Harvest and Post-Harvest Handling	143
<b>Unit 4.0 Other Direct Marketing Options</b>	<b>161</b>
Unit 4.0 Introduction and General Marketing Resources	163
Unit 4.1 Direct to Consumers—Farmers’ Markets and Roadside Stands	169
Unit 4.2 Direct to Restaurants and Retailers	189
Unit 4.3 Additional Marketing Options	197
<b>Unit 5.0 Marketing Basics</b>	<b>213</b>
<b>Unit 6.0 Building Resilience—Small Farm Planning &amp; Operations</b>	
Unit 6.0 Introduction to Building Resilience—Small Farm Planning and Operations	227
Unit 6.1 Building Resilience into Your Small Farm Marketing Plan, and Building Community with Social Media and On-Farm Events	239
Unit 6.2 Dynamic Cash Flow Planning	269
Unit 6.3 Basics of Bookkeeping, Farm Taxes, and Special Tax Issues—Value-Added and Perennials	283
Unit 6.4 Case Study Discussion—Instructor’s Guide	313

<b>Unit 7.0</b>	<b>Food Safety on the Farm</b>	319
<b>Unit 8.0</b>	<b>Farm Employees and Innovative Models for Interns and Apprentices</b>	349
<b>Unit 9.0</b>	<b>Land Tenure Options and Strategies</b>	371
	<b>General Resources</b>	391

# Preface and Acknowledgments

The first edition of *Teaching Direct Marketing and Small Farm Viability: Resources for Instructors* was published in 2005 as a complement to *Teaching Organic Farming & Gardening: Resources for Instructors* (published in 2003, with a new edition produced in 2015). Direct marketing through outlets such as Community Supported Agriculture projects and farmers' markets often goes hand-in-hand with the type of small- to medium-scale, organic, mixed specialty crop operations that many of the students in UC Santa Cruz's Apprenticeship in Ecological Horticulture and other beginning farmers are interested in developing. Issues of small farm viability and land tenure are also of particular interest to beginning farmers, and the first edition of the manual addressed those topics as well.

As reflected in this second edition, learning how to access direct markets is more relevant than ever. Direct marketing and local food venues, key outlets for small-scale farmers, have grown exponentially in the past decade. In 2002, there were 3,137 farmers markets in the U.S.—by 2014, there were 8,268.<sup>1</sup> Interest in locally grown foods has blossomed: the National Restaurants Associations survey of chefs notes that local food has “. . . topped the list of most important menu trends . . .” for the past few years.<sup>2</sup> The federal government, through the USDA, is promoting these local and more direct marketing venues through the program called “Know Your Farmer, Know Your Food,” which supports local and regional food systems across the U.S.<sup>3</sup> Not only is direct and local marketing now a standard and evolving practice, but there continue to be new farmers and new organizations helping people get into farming. The USDA's Beginning Farmer & Rancher Development Program, a significant funder of this

training manual project, has spent over \$70 million between 2009 and early 2014 on programs to benefit beginning farmers and ranchers.<sup>4</sup>

This manual was written, and updated, to assist farmer educators in their work. It is designed to serve –

- Instructors at college and universities, agriculture organizations, farm-training programs, and apprenticeship programs
- Agricultural Extension personnel
- Farmers with interns or apprentices
- Growers, teachers, and organizers at urban farms, community gardens, and food projects with direct-marketing outlets

This new edition is organized into nine units and has been revised and expanded to focus more specifically on the needs of the beginning farmer—targeting the basics of what she or he needs to know to have a successful farm operation.

All of the lectures and resource sections have been updated, and new units added on topics of particular importance to beginning farmers, including units on hiring labor and developing apprenticeships, addressing food safety, and implementing the basics of marketing (particularly the use of social media). Some of the primary updates reflect changes in marketing channels, with new information on retail, agritourism, eCommerce, food hubs, institutional markets, collaborative efforts, farm dinners, and marketing to faith-based communities. Also updated and expanded are the core elements of the original manual, including business planning, managing cash flow, direct marketing through Community Supported Agriculture (CSA), farmers' markets, roadside stands, and restaurants, as well as various land access strategies.

Similar to the original edition, this new version's units were written by staff and guest lecturers of the Apprenticeship in Ecological Horticulture at UC Santa Cruz, along with other invited experts (see Contributors and Reviewers, page viii). Thus, the manual provides a bounty of timely, useful information for educators and beginning growers.

---

1 Agricultural Marketing Service, USDA. 2014. Farmers markets and local food marketing: National count of farmers market directory listing graph-1994-2014. [www.ams.usda.gov/AMSv1.0/](http://www.ams.usda.gov/AMSv1.0/)

2 Willis, Kendra. 2013. Locally-sourced food dominates National Restaurant Association's top trends list for 2014. Extension, Michigan State University. [msue.anr.msu.edu/news/locally\\_sourced\\_food\\_dominates\\_national\\_restaurant\\_associations\\_top\\_trends](http://msue.anr.msu.edu/news/locally_sourced_food_dominates_national_restaurant_associations_top_trends)

3 USDA. 2013. Know your farmer, know your food—Our mission. [www.usda.gov/wps/portal/usda/usdahome?navid=KYF\\_MISSION](http://www.usda.gov/wps/portal/usda/usdahome?navid=KYF_MISSION)

4 National Sustainable Agriculture Coalition. 2014. Funding restored for beginning farmer training programs! NSAC's blog. [sustainableagriculture.net/blog/2014-bfndp-rfa/](http://sustainableagriculture.net/blog/2014-bfndp-rfa/)

This manual and *Teaching Organic Farming & Gardening: Resources for Instructors* are both available through our website at [casfs.ucsc.edu/about/publications](http://casfs.ucsc.edu/about/publications) for free download in PDF format (as individual units or the entire text). Print versions can be purchased at cost through the Center for Agroecology & Sustainable Food Systems (CASFS). It is our intention that these instructional materials be used as widely as possible for education and training. We also plan to update and add materials to both the web-based and printed versions in the future, and we encourage educators to visit the website to offer evaluation and to send us instructional materials that may be of use in future revisions.

The development of this new resource was made possible with funding from Western SARE, Gaia Fund, True North Foundation, and the USDA Beginning Farmer and Rancher Development Program. The first edition in 2005 was also supported by the Foundation

for Sustainability and Innovation, and the Organic Farming Research Foundation.

This training manual represents the experience and work of many people. The authors and reviewers are listed on the Contributors page. The overall direction for the manual was devised by Jan Perez and Martha Brown. Jan Perez was the primary coordinator, working with authors to design and finish their drafts. She oversaw field-testing of curricula, and wrote or contributed to many of the units. Martha Brown also provided coordination and direction with two units, and oversaw the book's editing and production. We thank Jane Bolling of Jane Bolling Design for creating the beautiful cover design and updating the format, and Amy Bolton for her expertise in laying out and proofing the text. We also thank CASFS grant writer Ann Lindsey for bringing in the funding for the project and helping to shape and guide it along the way, and Daniel Press, CASFS Executive Director, for his support throughout the project.

# Contributors and Reviewers

## CONTRIBUTORS

### MARTHA BROWN (*Editor*)

Martha Brown, the Center's Principal Editor, writes, edits, and designs the Center's publications, along with managing the Center websites and other outreach efforts.

### CATHY CARLSON (*Food Safety on the Farm*)

Cathy of Carlson Food Safety Consulting works with produce growers providing assistance with risk assessment, customer audit preparation and employee training to farms of all sizes. She is a Food Safety Committee Member at Hartnell College and a Farmer Fellow with Eco-Farm. Previous roles include Food Safety Program Manager at Community Alliance with Family Farmers, QA and Food Safety Manager at Fresh Leaf Farms, project manager at California Organics; and project manager at the US Department of Agriculture.

### TINA COSENTINO (*Overview of Produce Marketing, Marketing Basics*)

Tina Cosentino is the Purchasing Manager at Veritable Vegetable, the first all organic wholesale produce company in the U.S. She grew up packing apricots to sell at her family's retail market, "Cosentino's" which was a successful family business in San Jose, CA for over 65 years. She has spearheaded farmer education programs in California, Mexico and Ecuador. Tina holds an MBA in Agribusiness from Santa Clara University and a BS in Environmental Studies from UCSC.

### POPPY DAVIS (*Building Resilience—Small Farm Planning & Operations*)

Poppy Davis worked eight years at the USDA, most recently as the National Program Leader for Small Farms and Beginning Farmers and Ranchers. Previously she was a CPA with an emphasis in agricultural enterprises and non-profits. She holds a Juris Doctor from Drake University Law School, a Masters in Journalism from Georgetown, and a BS in Agricultural Economics from the University of California at Davis.

### RAMAN MAANGAT (*Food Safety on the Farm*)

Raman Maangat is the Food Safety Program Manager at the Community Alliance with Family Farmers (CAFF). She grew up on a diverse horticultural operation in British Columbia and moved to California in 2011. Her practical experience combined with her

degree in Food Science from the University of British Columbia has enabled her to work with growers and throughout the supply chain to develop plans for various operations.

### LIZ MILAZZO (*Community Supported Agriculture*)

Liz Milazzo has been the Field Production Manager for the Center since 2007, where she also teaches row crop and CSA production skills. Prior to joining the Center's staff, she managed the field production at Zen Center Green Gulch Farm in Marin County for 7 years. She has gardened and farmed in the Bay Area for 25 years, growing fresh vegetables for diverse markets.

### ALBIE MILES (*Editor; Community Supported Agriculture, Other Direct Marketing Options*)

Albie Miles was the original editor for *Teaching Direct Marketing & Small Farm Viability: Resources for Instructors*, and is now Assistant Professor of Sustainable Community Food Systems at the University of Hawaii, West Oahu. He received his PhD in Environmental Science, Policy and Management from UC Berkeley.

### SKY DE MURO-MILLER (*Community Supported Agriculture*)

Sky De Muro-Miller is a Garden Instructor at the UCSC Farm & Garden, where she helps manage the Alan Chadwick Garden. She also organizes and teaches workshops for the public and for beginning farmers on the Central Coast.

### DOUG O'BRIEN (*Overview of Produce Marketing*)

Doug O'Brien owns and operates Doug O'Brien Agricultural Consulting, which provides on-site technical advice, field monitoring, and research for fresh produce growers and shippers in the Monterey Bay Area. Doug has a PhD in plant pathology and was an assistant farm advisor. He also has experience in farming and owned an organic produce brokerage.

### JESSICA BECKETT PARR (*Community Supported Agriculture*)

Jessica Beckett Parr is the Foundation Program Manager for the California Certified Organic Farmers (CCOF) Foundation. She holds a MSc in Community Development from UC Davis where she worked with professor Ryan Galt and a team researching Commu-



nity Supported Agriculture (CSA) in the Central Valley of California. In her position with CCOF she organizes a diverse set of educational and support programs and events for farmers and consumers regarding organic agriculture.

JAN PEREZ (*Editor; Other Direct Marketing Options*)

Jan is an Associate Specialist in Social Science Research and Education at the Center. She has been conducting research and evaluation on programs and social issues in the food system at the Center since 2001. She received an MS in adult education from the University of Wisconsin, Madison.

KRISTIN A. REYNOLDS (*Small Farm Economic Viability*)

Kristin is an adjunct faculty member at the New School for Public Engagement in New York City and she also teaches at the Yale School of Forestry and Environmental Studies. She received her PhD in Geography and MS in International Agricultural Development from University of California, Davis. Her current research explores urban agriculture, social justice in the food system, and action research. She has also worked at the UC Small Farm Program and has lived and worked on small scale family farms in California, New York, and France.

STEVE SCHWARTZ (*Other Direct Marketing Options, Land Tenure Options and Strategies*)

Steve Schwartz founded the Interfaith Sustainable Food Collaborative in 2012 and California FarmLink in 1998. He has over 20 years of experience in the fields of sustainable agriculture, rural development, environmental conservation, and microfinance, as well as general program management, community organizing, public policy and fundraising. His faith community organizing includes work with Jewish, Christian, and Buddhist congregations. He has presented numerous workshops on the use of conservation easements for farm transitions, farm succession planning, and innovative financing techniques for farm purchases.

NANCY VAIL (*Community Supported Agriculture*)

Nancy Vail is co-founder and co-director of Pie Ranch, an educational farm in Pescadero, California. From 1998–2008 she managed the UCSC Farm's community supported agriculture program and taught row crop production, orchard management, and marketing skills.

RYAN VOILAND (*Farmers' Markets and Roadside Stands*)

Ryan Voiland has been farming since he started his own business growing certified organic vegetables in his parents' yard when he was 14. He studied fruit

and vegetable horticulture and farm management at Cornell University, and now owns a 50-acre farm in Granby, Massachusetts. Ryan was the original author of this section.

ERIC WINDERS (*Land Tenure Options and Strategies*)

Eric Winders is Development Program Manager for California FarmLink. With FarmLink since 2009, he previously served as Central Coast Regional Program Coordinator, providing farmers and landowners along California's Central Coast with technical assistance and education on land tenure, financing, and business development. He has a Master's in Environmental Sciences and Policy, with a focus on small farms, and has spent much of his life working in agriculture and horticulture, including work in New York, Costa Rica, and Spain.

## REVIEWERS

Marisa Alcorta is the General Manager for Pie Ranch's 200-acre farm expansion project located in Pescadero, California

Ann Baier is a Program Specialist in California for the National Center for Appropriate Technology.

Jo Ann Baumgartner is Director of the Wild Farm Alliance, Watsonville, California

Tina Cosentino (see Contributors)

Poppy Davis (see Contributors)

Elizabeth Henderson is a co-author of *Sharing the Harvest, Revised and Expanded: A Citizen's Guide to Community Supported Agriculture*

Reggie Knox is the Executive Director of California FarmLink, Santa Cruz, California

Neil Thapar is a Staff Attorney at the Sustainable Economies Law Center, Oakland, California

Nancy Vail, (see Contributors)

Eric Winders (see Contributors)

*Note that this list acknowledges Contributors and Reviewers to the first edition, as well as the current edition.*

# How to Use This Resource

**T**eaching *Direct Marketing and Small Farm Viability: Resources for Instructors* provides resources for teaching a variety of skills and topics related to small farm viability, including options for direct marketing, business planning, issues related to labor, apprenticeships, food safety, and land tenure options. It also offers an overview of small farm viability and produce marketing in the U.S. to give agriculture students, farm apprentices, and other trainees a context for the challenges that small-scale growers face in developing an economically viable farming operation.

This teaching manual is a companion volume to *Teaching Organic Farming and Gardening: Resources for Instructors*, a largely production-oriented and field-based resource that includes natural science and social science course material for sustainable agriculture instruction (see more at [casfs.ucsc.edu/about/publications](http://casfs.ucsc.edu/about/publications)).

This nine-unit manual is designed so that units or individual lectures can be used on their own or in any sequence. The theme and content of each of the nine units are described immediately below, followed by a description of the different components of the units.

## UNIT 1. SMALL FARM ECONOMIC VIABILITY

This unit provides the context for subsequent studies of the economics of small-scale agriculture. Following an overview of the trends and factors affecting the economic viability of small-scale agriculture in the U.S., the unit addresses the history of U.S. agriculture's economic development, the social and economic factors affecting small farm viability, and the barriers small-scale growers face to achieving economic success. It concludes with a brief review of short-term economic strategies and long-term public and private sector strategies geared toward maintaining small farms as part of the American agricultural system.

## UNIT 2. OVERVIEW OF PRODUCE MARKETING

This unit introduces students to the history of produce marketing in the U.S. and discusses growers' most common marketing options. The historical overview reviews the changes growers made to their marketing practices after the advent of supermarkets and 20th century technology, such as refrigerated

shipping and storage. Three main marketing options (wholesale buyers, grower/shipper/packers, and brokers) are introduced, stressing the advantages and disadvantages of each. The unit also discusses development of a marketing strategy and includes an overview of three alternative marketing options (direct to retail, farmers' markets, and community supported agriculture), which are covered in detail in subsequent units.

## UNIT 3. COMMUNITY SUPPORTED AGRICULTURE (CSA)

The six sections of this unit on direct marketing through Community Supported Agriculture address multiple aspects of the CSA model. The unit opens with a section on the history of CSA, introducing principle figures and the economic and social values that have directed the development of this model of sustainable agriculture in Europe, Japan, North America, and beyond. It includes a discussion of how CSAs have changed over the past decade, from "membership" farms to "subscription" models. Subsequent sections address the practical aspects of developing and managing CSA operations, including CSA organization, outreach, administration, crop planning, and harvest and post-harvest crop handling.

## UNIT 4. OTHER DIRECT MARKETING OPTIONS

This four-part unit includes sections on a number of creative marketing options that small-scale producers are using to maintain the economic viability of their operations, and addresses the rewards, challenges, and techniques for cultivating marketing outlets. These lectures address the strategies for cultivating direct marketing outlets such as farmers' markets, roadside stands, eCommerce, agritourism and faith based options. This unit also covers what have been traditionally considered intermediate marketing options, such as restaurants, retail, institutions (schools, colleges, hospitals, etc.), food hubs and collaborative ventures.

## UNIT 5. MARKETING BASICS

This unit addresses the standard 4 P's of marketing: Product, Place, Price and Promotion, and reviews the steps for communicating who you are as a farmer. It starts by asking farmers to think about their desired market channels and target audience, then some brief steps for evaluating the demand for your product. Much of the unit focuses on how to

develop a brand and value proposition, and how to communicate that to the target customer segment, including basic instructions on developing a website and using social media.

#### **UNIT 6. BUILDING RESILIENCE—SMALL FARM PLANNING AND OPERATIONS**

This five-part unit provides a comprehensive overview of the business side of the farming operation, including practical advice on how to approach it. Using a case study to demonstrate the need for thoughtfulness and planning, it covers the steps for creating a resilient and successful farm by developing a business plan that integrates a crop plan, marketing plan, financial plan and a time plan. It also explores using social media and farm dinners as two different strategies that can build resilience. Finally, it addresses important business basics about cash flow planning, bookkeeping, and taxes.

#### **UNIT 7. FOOD SAFETY ON THE FARM**

This unit introduces the topic of food safety on the farm, and why it has become an increasingly important issue for growers. Lectures review the various sources and types of microbial contaminants and the “good agricultural practices (GAPS)” approach to evaluating potential risks and developing a food safety plan. The unit includes examples of logs, checklists, and other tools used in assessing and minimizing the risks of microbial contamination, and discusses the importance of maintaining biological diversity in light of food safety concerns.

#### **UNIT 8. FARM EMPLOYEES AND INNOVATIVE MODELS FOR INTERNS AND APPRENTICES**

This unit covers the basic information about having employees on a farm. Although most beginning farmers will start out by using just their own labor, as they expand they often need to bring in help. Topics addressed include employee protections under federal and California state labor laws, and the basics that are required for doing taxes and complying with other regulations. This unit also outlines different types of working relationships often used by farmers, such as hiring contractors, interns, and apprentices, and discusses ways to set up a legal apprenticeship program.

#### **UNIT 9. LAND TENURE OPTIONS**

This unit introduces a range of strategies that farmers can use to identify and secure long-term and affordable access to agricultural land. Along with cash rental, lease, and crop-share arrangements, it reviews a range of innovative approaches such as partnership options, owner financing, conservation easements, land pool-

ing, community land trusts, and leases to nonprofits. It also provides specific information to new farmers about how to find a piece of land to rent or purchase, and how to execute a fair lease.

#### **UNIT COMPONENTS**

Each unit in this manual contains multiple components and is designed for use by both the instructor and students. Note that not all units contain all of the components outlined below.

The units are designed with some or all of the following components:

##### **Introduction—An overview for use by both instructor and students**

In the Introduction, the Unit Overview summarizes the unit and briefly describes the information to be conveyed through the lecture(s) and (in some units) student exercises, as well as the approximate time for the activities.

##### **Lecture Outlines—Instructor and student outlines that guide presentations and discussions**

The lecture outlines provide a broad but comprehensive overview of a given subject, identifying many of the key concepts within a given discipline that may be addressed in an introductory lecture. Instructors are encouraged to adapt the content of the lecture to specific audiences or settings. Some units have one lecture outline and some have several. We suggest that the instructor give copies (or electronic versions) of the lecture notes to the students before the lecture.

##### **Step-By-Step Sheets—For student use**

These detailed “how-to” instructions walk students through tasks such as developing a cash flow projection and assessing the economic viability of a farming operation or developing a crop plan for a CSA operation. The step-by-step sheets contain reference information for students to use when working independently. Intended to be provided with Student Exercises described below.

##### **Student Exercises**

These activities or exercises reinforce student comprehension of the subject matter or skill by providing practice following a lecture or demonstration.

##### **Resources and References**

This section provides an annotated list of books, periodicals, websites, and other electronic resources, videos, and organizations that offer ideas and information for implementing the concepts presented in the unit or provide resources for further study. Based

on their relevance to the material, the same resources may be listed in more than one unit. In some instances the section may include material cited in the lectures.

### **Appendix Section**

The appendices provide tables, graphs, charts, student exercises, and other material to use as visual aids in lectures and demonstrations, or as reference materials for student exercises.

### **Online Resources**

Each of the units in this manual is also available online as a .pdf. Also online are the various Excel files referenced in Unit 6. We will continue to add material to the online materials at: [casfs.ucsc.edu/about/publications](http://casfs.ucsc.edu/about/publications). Look for the *Teaching Direct Marketing and Small Farm Viability: Resources for Instructors* link.

# The Center for Agroecology & Sustainable Food Systems, and the Farm & Garden Apprenticeship

The Center for Agroecology and Sustainable Food Systems (CASFS, the Center) is a research, education, and public service unit of the Division of Social Sciences at the University of California, Santa Cruz, dedicated to increasing ecological sustainability and social justice in the food and agriculture system. Center research and education efforts seek to increase understanding of the social, economic, political, and ethical foundations of agricultural sustainability; to establish the ecological and agronomic basis for sustainable production systems; and to demonstrate and facilitate the use of information critical to the adoption of sustainable food and agriculture systems.

The Center's work covers a spectrum that includes academic education and practical training, theoretical and applied research, and public service for audiences ranging from international grower groups to local school children. The Center's 3-acre Alan Chadwick Garden and the 33-acre UCSC Farm are unique organic demonstration, education, and research sites on the UCSC campus.

The Farm & Garden Apprenticeship is a six-month training program held annually at the Center's farm and garden sites. Initiated by Alan Chadwick in 1967, this full-time course now brings participants of all ages from around the world to learn the basic skills of organic gardening and farming, while also studying the complex social and environmental issues surrounding sustainable agriculture and food systems. The program combines classroom instruction, small group demonstrations, and readings with hands-on learning in the fields, gardens, greenhouses, and orchards. The main instructors in the Apprenticeship course are the two Garden Managers and the Field Production Manager, who work daily alongside the apprentices, present classes, and lead training sessions. UCSC faculty, researchers, and members of the agricultural and urban gardening community add a wide range of expertise to the course.

To date nearly 1,500 apprentices have completed the Apprenticeship training program. Graduates have established their own commercial farms and market gardens, run community gardens for inner city and prison populations, and developed school garden programs. Many graduates take part in international develop-

"There are very few programs that provide an academic component to the very real world of organic agriculture. This [Apprenticeship] program ranks among the very best in the nation thanks to the skill of the instructors, the diversity of the students, and the certified organic gardens and fields themselves."

—Bob Scowcroft, *Founding Director*  
*Organic Farming Research Foundation*

ment and food security projects. Others have raised the standards of the organic food industry through work with certification programs and retailers. One of the most important outcomes of the Apprenticeship is the ripple effect our graduates have working locally, nationally, and internationally to practice, promote, and teach sustainable, organic farming and gardening.

Our on-campus farm and garden are open to the public year-round. Thousands of visitors come annually to see the hundreds of varieties of annual vegetable and flower crops, fruit trees, and perennial plantings, and to learn about sustainable growing methods, research projects, and education programs. Also based at the UCSC Farm, the non-profit group Life Lab hosts pre-K-12 science, nutrition, and environmental education programs, and the "Food, What?!" youth empowerment program. In conjunction with our support group, the Friends of the UCSC Farm & Garden, the Center offers a year-long series of organic gardening classes, workshops, and seasonal celebrations for the community.

For more information on the Center and its activities, contact us at:

CASFS  
1156 High Street  
University of California  
Santa Cruz, CA 95064  
831.459-3240  
casfs@ucsc.edu  
and visit our website, [casfs.ucsc.edu](http://casfs.ucsc.edu)

For questions about the Apprenticeship in Ecological Horticulture program, see the Center's website, [casfs.ucsc.edu](http://casfs.ucsc.edu) and [www.growafarmer.org](http://www.growafarmer.org), or contact us at 831.459-3240, [casfs@ucsc.edu](mailto:casfs@ucsc.edu).