

A companion volume to
*Teaching Organic Farming
and Gardening:
Resources for Instructors*

Resources for
Instructors



Teaching Direct Marketing and Small Farm Viability

UCSC Farm & Garden Apprenticeship
Center for Agroecology &
Sustainable Food Systems
University of California
Santa Cruz

Edited by Albie Miles and Martha Brown

The Center for Agroecology & Sustainable Food Systems is a research, education, and public outreach group dedicated to increasing ecological sustainability and social justice in the food and agriculture system. Our mission is to advance sustainable food and agricultural systems that are environmentally sound, economically viable, socially responsible, nonexploitative, and that serve a a foundation for future generations. The Center is located at the University of California, Santa Cruz.

For information about ordering this publication, contact:

CASFS
1156 High St.
UC Santa Cruz
Santa Cruz, California 95064
831.459-3240
TrainingManual@ucsc.edu

The manual can be downloaded for free in pdf format from: casfs.ucsc.edu/education/instruction/tdm/index.html

Funding for this publication was provided by:

The True North Foundation
The Foundation for Sustainability and Innovation
The Organic Farming Research Foundation

Cover photos by Jered Lawson

Design by Nancy Enge, Ajax Design

Printing by UC Santa Cruz Printing Services



©2005, 2008 Center for Agroecology & Sustainable Food Systems
University of California, Santa Cruz
Santa Cruz, CA
www.ucsc.edu/casfs

No endorsement of names, products, or suppliers is intended

Table of Contents

Foreword	v
About CASFS and the Farm & Garden Apprenticeship	vi
Preface and Acknowledgments	vii
Contributors and Reviewers	ix
Introduction: How To Use This Resource	1
Unit 1.0 Small Farm Viability Today	
Unit 2.0 Small Farm Business Planning	
Unit 3.0 Overview of Produce Marketing	
Unit 4.0 Community Supported Agriculture (CSA)	
Unit 4.1 CSA History	
Unit 4.2 CSA Structure and Organization	
Unit 4.3 CSA Outreach	
Unit 4.4 CSA Administration	
Unit 4.5 CSA Crop Planning	
Unit 4.6 CSA Crop Rotation and Soil Fertility	
Unit 4.7 CSA Harvest and Post-Harvest Handling	
Unit 5.0 Other Direct Marketing Options	
Unit 5.1 Farmers' Markets and Roadside Stands	
Unit 5.2 Collaborative Marketing Groups and Agricultural Cooperatives	
Unit 5.3 Regional Agriculture Economic Development: "Buy Local" Campaigns	
Unit 5.4 Institutional Marketing Relationships and Farm-to-School Programs	
Unit 5.5 Direct Marketing to Restaurants	
Unit 6.0 Land Tenure Options	

Foreword

Following the success of our first training manual, *Teaching Organic Farming and Gardening: Resources for Instructors*, published in 2003, staff at the Center for Agroecology and Sustainable Food Systems (the Center) expanded their efforts to develop teaching resources for instructors interested in sustainable agriculture and food systems. It gives me great pleasure to write this foreword for the second manual in the series, which focuses on the business of developing and managing a small farm enterprise, with an emphasis on Community Supported Agriculture and other direct marketing strategies.

Teaching Direct Marketing and Small Farm Viability: Resources for Instructors represents the accumulated knowledge and experience of Center instructors and other presenters who have participated in our Apprenticeship in Ecological Horticulture (see page vi). In addition, researchers, Cooperative Extension personnel, and other professionals with expertise in small farm viability, marketing, economics, and business planning have contributed to this volume either as authors or as reviewers. As a result, the manual contains a wealth of practical information, lecture outlines, and resource lists that draw upon recent research findings as well as reflecting up-to-date information on printed and web-based resource materials.

You may ask why we have focused on small farms in the manual, given the predominance and importance of large-scale farm enterprises in U.S. agriculture. First, our experience and expertise at the Center is at the scale of what are regarded as small farms (see Unit 1.0 for a discussion of what this means). Further, the business and marketing approaches for small, typically diverse and specialty crop enterprises are quite different from those for large agribusiness, requiring attention to niche markets and other strategies to compete in the marketplace. In addition, similar resources for

large-scale agribusiness can be readily obtained from a number of agricultural economics departments and extension groups in the U.S. Land Grant Universities. This manual complements these resources and provides a much-needed synthesis of information pertinent to current and potential small farmers.

This teaching resource also reflects the growing importance of direct marketing and local market channels to small- and mid-scale organic producers. Based on responses to the Fourth National Organic Farmers' Survey, published in 2004 by the Organic Farming Research Foundation, "The greatest percentage of respondents indicated that they plan market channel increases in direct-to-consumer markets (51% of respondents) and direct-to-retail (47% of respondents), followed by sales to local markets within 100 miles of farm (45% of respondents)." U.S. Department of Agriculture Economist Catherine Greene has noted that, "Many industry observers believe that the sector of small and mid-sized organic producers, who emphasize fresh, high-quality farm products, local markets, and direct exchange with consumers, will remain strong even as the organic industry expands and larger growers, processors, and retailers enter the market."

As a professor I plan to use elements of the manual in undergraduate teaching, and particularly appreciate the practical exercises included that will allow students to gain a better understanding of what goes into creating a successful small farm enterprise. I commend the efforts of all involved in the production of this manual, and anticipate that instructors in a wide range of education and training settings will find the manual as useful as I do.

– Dr. Carol Shennan
Director, Center for Agroecology &
Sustainable Food Systems
University of California, Santa Cruz

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

The Center for Agroecology and Sustainable Food Systems (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 Alan Chadwick Garden and the 25-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 Farm Manager, the two Garden Managers, and the Community Supported Agriculture (CSA) Manager who work daily alongside the apprentices, present classes, and lead training sessions. UCSC faculty, researchers, and members of the agricultural community add a wide range of expertise to the course.

The Apprenticeship staff and trainees grow and direct market an incredible diversity of organic produce, flowers, and plants as part of the training program, both for education, demonstration, and outreach purposes, and to generate funding for the program.

Increasingly, our marketing efforts and marketing education have focused on direct-to-consumer strategies—apprentices help run our 100-member community supported agriculture (CSA) program, and learn to manage harvests and sales for our roadside produce stand and farmers' market stand.

To date more than 1,000 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 development 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 promote, practice, and teach sustainable, organic farming and gardening.

Our 25-acre farm and 3-acre garden are vibrant demonstration and education sites open to the public year-round on the UCSC campus. 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. The Center and the Life Lab Science Program work together to put on school group tours and a children's summer camp using the Life Lab Garden Classroom at the farm. In conjunction with our community 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 more information on the Center and its activities, contact us at:

CASFS
1156 High St.
University of California
Santa Cruz, CA 95064
831.459-3240, casfs.ucsc.edu

For questions about the Apprenticeship program, see the Center's web site or contact us at 831.459-2321, apprenticeship@ucsc.edu.

Preface and Acknowledgments

This direct marketing and small farm viability guide is modeled after and meant to complement our first training manual, *Teaching Organic Farming and Gardening: Resources for Instructors*, published in 2003. Now used worldwide, this 600-page resource covers organic farming and gardening skills and concepts, applied soil science for growers, and social and environmental issues in agriculture. Here's what other educators have said about this first manual –

“We have found *Teaching Organic Farming and Gardening: Resources for Instructors* to be an exceptional resource that is practical and well organized. . . . I urge anyone who is considering offering organic farming as a formal course or a practical training activity to visit the web site of the Center for Agroecology & Sustainable Food Systems at UC Santa Cruz to review this material.”

Charles Francis, Professor of Agronomy
University of Nebraska
North American Colleges and Teachers of Agriculture Journal, Vol 48, No. 4, Dec. 2004

“Both the Center for Agroecology & Sustainable Food Systems and the UCSC Farm & Garden Apprenticeship have been in the forefront of organic farming and gardening for many years. Their track record has been excellent and this resource guide is no exception. This resource guide is likely to become the benchmark for such materials and promises to be very useful to educational, extension, research and other professional institutions and programs interested in training organic farmers and gardeners.”

Raymond Poincelot, Professor of Biology
Fairfield University
Journal of Sustainable Agriculture, Vol. 23 (1), 2003

“This is an excellent resource for us because of its content, organization and flexibility. The CASFS staff instructors who developed this manual have tremendous knowledge of not only the subject matter, but also how to teach it to students and interns.”

Mark Van Horn, Director
University of California, Davis Student Farm

As these and other positive reviews came in for this largely production-based book, we also received the obvious questions: What about marketing, what about business planning, how can we teach about economic viability for small farms? For farmers, growing quality crops is just one step—making the farm or market garden an economic success requires another suite of skills, including finding land, planning appropriate marketing strategies for selected crops, and managing income and expenses.

Teaching these topics has become an increasing focus in the Center's six-month Farm & Garden Apprenticeship course (described on page vi). With apprentices interested in small-scale organic farming and market gardening (of mostly fresh vegetables, fruits, and flowers), our emphasis has been on direct marketing. Our apprentices have consistently expressed a keen interest in models like Community Supported Agriculture (CSA), through which farmers connect directly with consumers in a mutually beneficial relationship. Most of the lessons, handouts, and resources included in this manual have been created and field-tested with our apprentices both in the classroom and as part of their hands-on work experience running our 100-member CSA, our roadside produce stand, and other marketing efforts.

Geared toward a broad audience of agricultural educators, *Teaching Direct Marketing and Small Farm Viability: Resources for Instructors* is organized into six units, three focusing on marketing and three covering other topics related to making a small farm economically viable. Included are lessons and resources for running a CSA project, selling at farmers' markets, forming collaborative marketing groups and grower cooperatives, and selling to restaurants.

Also covered are strategies to improve small farm planning, including enterprise visioning and market assessment; creating a business plan, including marketing and crop plans; and managing cash flow. Land tenure options such as cash-rent leases from nonprofits, shared ownership models, conservation easements, and community land trusts are reviewed as additional mechanisms for addressing the complex issue of the economic viability of small-scale agriculture. This resource also reviews the trends and factors that influence small-scale agriculture's economics, and provides an

overview of produce marketing in the U.S. Please see the section entitled “Introduction: How to Use This Resource” for a detailed overview of each unit’s content.

The training manual is designed for –

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

This instructor’s resource features class lecture outlines, trainee exercises, and resource materials, with a focus on CSA. The different components of the units are described in detail in the Introduction section. The manual can be used in a classroom setting or adapted for other training formats, such as short courses, conferences, and field days.

This manual and our first training manual are available through our web site at casfs.ucsc.edu for free download in PDF format (as individual units or the entire text), as well as for sale in hard copy. 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 through the web version in the future, and we encourage educators to visit

the web site to offer evaluation and to send us instructional materials that may be of use in future revisions.

The development of this resource was made possible with funding from the True North Foundation, the Foundation for Sustainability and Innovation, and the Organic Farming Research Foundation.

While this training manual represents the experience and work of many people, the one individual who truly made it happen was our curriculum coordinator, Albie Miles. For two years Miles coaxed drafts and rewrites out of busy farm instructors and other contributors, oversaw field-testing and evaluation of classes and materials, and wrote or contributed to many of the units. As with the first training manual, Miles worked with our senior editor, Martha Brown, who oversaw the book’s editing and production. Brown reviewed and edited the book and worked with the designer and printer on a tight deadline to produce this attractive, accessible resource. We thank Nancy Enge of Ajax Design for creating the beautiful cover design as well as the format for the text, and Jered Lawson for the cover photographs. Other thanks go to Nancy Vail, our CSA coordinator, for bringing her years of expertise with CSA to the book project, and to our grant writer Ann Lindsey for bringing in the funding for the project and helping to shape and guide it along the way. We also thank the many writers and reviewers listed in the next section for their important contributions to the project.

Contributors and Reviewers

CONTRIBUTORS

POPPY DAVIS (*Small Farm Business Planning*)

Poppy Davis is a Certified Public Accountant with fifteen years of experience addressing tax and accounting needs for not-for-profit organizations, small businesses, and individuals, with an emphasis on agricultural enterprises. She currently works for the USDA Risk Management Agency in Davis, California, where she administers crop insurance programs and risk management outreach and education efforts. She is the treasurer of the board of the Community Alliance with Family Farmers and the Center for Land Based Learning, and also serves on the board of the California Invasive Plant Council.

MARTHA BROWN (*Editor*)

Martha Brown, the Center for Agroecology and Sustainable Food Systems' Senior Editor, writes, edits, and designs the Center newsletter, *The Cultivar*, and other Center publications, along with managing the web site and coordinating outreach efforts. She has a graduate degree in Science Communication from UCSC.

ALBIE MILES (*Editor, Project Coordinator, Community Supported Agriculture, Direct Marketing Options*)

Albie Miles is the Curriculum Project Coordinator for the Center for Agroecology and Sustainable Food Systems, and also serves as an Apprenticeship instructor. He also edited and coordinated the Center's first curriculum project, *Teaching Organic Farming and Gardening: Resources for Instructors*.

DOUG O'BRIEN (*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.

JAN PEREZ (*Community Supported Agriculture Research Bibliography*)

Jan Perez, an Associate Specialist in Social Issues at the Center for Agroecology and Sustainable Food Systems, conducts research on food systems' topics, including

Community Supported Agriculture. She has a Master's degree in continuing and vocational education from University of Wisconsin, Madison.

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

Kristin A. Reynolds is a graduate student in International Agricultural Development at UC Davis, a graduate research assistant at the UC Small Farm Center, and a founding member of the UC Students for Sustainable Agriculture. Her research interests include identifying strategies to increase non-farmer awareness of agricultural systems, and maintaining small farms as part of biologically diverse landscapes. Future research and action will include aspects of social and environmental justice in the agri-food system.

STEVE SCHWARTZ (*Land Tenure Options*)

Steve Schwartz is Executive Director of California FarmLink. California FarmLink was founded in 1998 as a non-profit organization to build family farming and conserve farmland in California by linking aspiring and retiring farmers. California FarmLink also promotes techniques and disseminates information that facilitates intergenerational farm transitions.

NANCY VAIL (*Community Supported Agriculture*)

Nancy Vail manages the UCSC Farm's community supported agriculture program, a 100-share CSA program run by Apprenticeship staff and students in the Center's Apprenticeship training program. In addition to teaching CSA management, Nancy also trains apprentices in marketing and field production, and coordinates row crop and orchard production at the UCSC Farm.

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 and his staff annually grow about 20 acres of vegetable and flower crops, most of which are direct marketed via two roadside stands, farmers' markets, and a CSA program. Ryan is also a board member in a regional nonprofit organization, Community Involved in Sustaining Agriculture (CISA).

REVIEWERS

Steven C. Blank, PhD is an agricultural economist with the Agricultural and Resource Economics Department, University of California, Davis.

Nancy Hanson is the Manager/Vegetable Production Supervisor for the Community Supported Agriculture Program at Hampshire College, Massachusetts.

Phil Howard, PhD is a post-doctoral researcher in the Social Science Research Program at the Center for Agroecology and Sustainable Food Systems.

Ellie Kastanopolous is Executive Director of Equity Trust, Inc., and former director of the Maine Land Trust.

Jered Lawson is the Central Coast regional coordinator for the Community Alliance with Family Farmers (CAFF), and coordinated CAFF's Central Coast "Buy Fresh, Buy Local" campaign.

Brett Melone is Executive Director of the Agricultural Land Based Training Association in Salinas, California.

Liv Nevin coordinates the Central Coast "Buy Fresh, Buy Local" campaign of the Community Alliance with Family Farmers in Watsonville, California.

Carol Shennan, PhD is Director of the Center for Agroecology and Sustainable Food Systems, and a faculty member of UCSC's Environmental Studies Department.

Wolfgang Stränz is a Community Supported Agriculture farmer from Germany who helped found the farm at Buschberghof that helped start the CSA movement.

Laura Tourte is the Cooperative Extension County Director and Farm Advisor for Santa Cruz County, specializing in the areas of farm management and small farms.

Julie Wiley and Andy Griffith manage Mariquita Farms and Two Small Farms Community Supported Agriculture project, a 250-member CSA and direct marketing organic farming operation on California's Central Coast.

Thomas Wittman is the Operations Assistant for the Center for Agroecology and Sustainable Food Systems, and an organic farmer with the Molino Creek Farming Collective.

Also contributing

Aaron Blyth and Allegra Foley, second-year apprentices in the Center's Apprenticeship training program

Melissa Larson, beginning farmer and graduate of the Farm & Garden Apprenticeship training program

Jim Leap, Farm Manager for the 25-acre UCSC Farm

David Visher, Small Farm Marketing Consultant

Introduction: How to Use This Resource

Teaching 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 direct marketing, business planning, 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 can serve as 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. The manual is designed so that units or individual lectures can be used on their own or in any sequence.

The teaching manual is divided into six units. The theme and content of each of the six units are described immediately below, followed by a description of the different components of the units.

UNIT 1. SMALL FARM VIABILITY TODAY

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. SMALL FARM BUSINESS PLANNING

This unit provides practical advice on how to approach business planning in the start-up phase of a small farming operation. The first section gives an overview of why and how to plan a small farming enterprise. The second section examines a sample business plan in detail, and includes interactive exercises. The third section demonstrates how to develop a month-by-month cash flow projection for the first two years of

a new farm. The main goal of this unit is to encourage students to see holistic business planning as a necessary and integral part of farming.

UNIT 3. OVERVIEW OF PRODUCE MARKETING

This unit introduces students to the history of produce marketing 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 closes with a brief overview of three alternative marketing options (direct to retail, farmers' markets, and community supported agriculture), which are covered in detail in subsequent units.

UNIT 4. COMMUNITY SUPPORTED AGRICULTURE (CSA)

The seven 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. Subsequent sections address the practical aspects of developing and managing CSA operations, including CSA organization, outreach, administration, crop planning, crop rotation and soil fertility, and harvest and post-harvest crop handling.

UNIT 5. OTHER DIRECT MARKETING OPTIONS

This unit includes sections on a number of creative marketing options that small-scale producers are using to maintain the economic viability of their operations. These options are also of interest to sustainable agriculture and community development activists who want to develop more sustainable food systems while supporting small-scale farming operations. Sections address the rewards, challenges, and techniques for cultivating marketing outlets such as farmers' markets and roadside stands, as well as restaurants, schools, hospitals, and other institutions. A section on cooperative marketing groups and producer cooperatives introduces the ways that small producers can

collaborate to overcome issues of economies of scale and consolidation within the industry. Techniques for developing regional economies through programs such as “buy local” campaigns are also examined.

UNIT 6. LAND TENURE OPTIONS

This unit introduces a range of strategies that farmers can use to 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, conservation easements, land pooling, and community land trusts.

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.

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

This section provides an annotated list of books, periodicals, web sites, 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.

Appendix Section

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