Community Supported Agriculture

...Making the Connection

A 1995 Handbook for Producers

University of California Cooperative Extension
Placer County

Presented by:

Small Farm Center
University of California, Davis

CSA Handbook

Project Coordinators and Editors:

Sharon K. Junge
University of California Cooperative Extension, Placer & Nevada Counties, County Director

Roger Ingram
University of California Cooperative Extension, Placer & Nevada Counties, Farm Advisor/Pasture and Livestock

Garth E. Veerkamp
University of California Cooperative Extension, Placer & Nevada Counties, Farm Advisor/Extension Horticulturist

Senior Writer:

Bill Blake
University of California Intern, Program Representative

Other Collaborators:

Small Farm Center
University of California, Davis

Marcie A. Rosenzweig

Layout & Design:

Nancy Jane Campbell

Printed in the United States of America.

Preface

The literature on Community Supported Agriculture to date has dealt largely with specific projects. These examples have been enough to interest hundreds of farms to start new CSA projects. Each new situation brought innovations.

In addition to the diverse options under the umbrella term "CSA," a number of common threads have emerged. ***Making the Connection*** is an effort by Placer County Cooperative Extension and the Small Farm Center to describe these threads to farmers and respond to common problems and questions. The hope is that it will entice more local farmers to start CSAs, and make the process a little easier.

Although only a few people wrote and edited this handbook, many people made direct and indirect contributions by their writings and examples. Throughout the text are the names of farms and farmers whose experience made this handbook possible.

How to Use this Handbook

This handbook has been designed as a workbook. In addition to the narrative text and examples from CSA farms, there are places that ask you to think about the material, consider how it applies to your situation, and write down your thoughts.

The handbook is divided into chapters, each covering a general subject. The chapters are divided into sections. Several sections end with worksheets that pose questions about you and your farm. The answers will help you develop your CSA. At the end of several chapters are blank charts and forms. Use them for running your CSA or adapt them so they fit your project. Places in the text which refer to one of the worksheets, charts or forms are marked with an icon:

The appendix of this handbook treats a number of subjects in greater detail. Topics in the main text which are further explained in the appendix are also marked with an icon:

Finally, this material has been published in a binder so that you can easily remove and insert items, and so that copying material will be easier.

In using this handbook, if you find something which is wrong, doesn't work for you, or ought to be changed, please contact Placer County Cooperative Extension *(11477 E Avenue, Auburn, CA 95603)* at **(916) 889-7385** or FAX (916) 889-7397, in order that future editions of this publication can be improved.

Community Supported Agriculture

Table of Contents

Table of Contents *(continued)*

3. PRODUCTION *(CONTINUED)*

4. MANAGING THE SHARES 1 – 31

Table of Contents *(continued)*

Introduction

"Belonging to a CSA allows me to support and invest in something in which I believe — something which is good for my senses and good for the earth. It is difficult to explain the satisfaction I get from knowing where my food comes from."

—CSA member

Satisfaction. The word comes up again and again in discussions of Community Supported Agriculture. This chapter explains CSA and why participants find it appealing. It also starts farmers on the first steps to examining their current operations and making the change to CSA.

The sections in the chapter are:

Community Supported Agriculture

What Is It?

This section covers the history of CSA and benefits of CSA projects.

Community Supported Agriculture (CSA) is the name for a variety of partnerships between farmers and consumers. In CSA, consumers buy products directly from the farm, and pay for them in advance. Farmers do their best to produce sufficient quantities, quality of food and variety to meet consumers' needs.

The specific form that CSA takes depends on the community and the farm. The arrangement as it first appeared in the U.S. is the **shareholding, participatory** CSA. A group of people who want fresh produce from a known source organize, find land, hire a farmer or gardener, and plan out the crop mix, amount of produce, and cost per consumer. They then pre-pay either in full or in installments for their portions of the farm's production.

CSA is a partnership between farmer and consumers.

As each crop comes in, the harvest is divided into shares, which are typically large enough for two to five people. Members receive these shares once or twice a week. In addition to putting up money, members may also give time to the garden, four or eight or more hours over the season. In this arrangement, the farmer cuts down on time spent marketing and can concentrate on the actual farming. Consumers assure the farmer's salary and in return receive a regular supply of a variety of fresh vegetables and fruits, usually organically grown. In addition, the risk of a crop failure, which can be devastating to an individual farmer, is spread over the whole membership.

A distinct spinoff called **subscription** farming is common in California, and is usually **farmer-directed**. Here again, the consumers pre-pay, but involvement is reduced. An existing farm which may also sell wholesale or at farmers' markets makes weekly share deliveries whose value is basically pre-determined. That is, in the shareholding CSA the amount delivered depends on how much is ready to harvest, but in a subscription CSA the amount delivered has a market value equal to however much the share cost. Subscription arrangements are more flexible, because members pay by the quarter or month, or even by the week. Also, members are not expected to donate labor to the farm. Subscription farming, therefore, allows farms to diversify their marketing and to receive payment for some of their production ahead of time.

Community Supported Agriculture

...Making the Connection

CSAs trace their beginning to Japan in 1965. The Seikatsu Club Consumers Cooperative was founded in the Tokyo area by 200 women seeking a clean supply of milk. It has developed into a buying cooperative of 150,000 member-families, and has started other companies, begun recycling shops, and provided child-care services. It currently employs about 700 people. In the mid-1970s, the same type of producer-consumer associations came to Europe, where they are somewhat smaller.

Jan VanderTuin became involved with consumer-producer cooperatives in Switzerland in the early 1980s, then brought the idea of CSA to the U.S. With Robyn Van En, John Root, and Hugh Ratcliffe, he co-founded the first American CSA, in South Egremont, Massachusetts in 1985. In 1986, Trauger Groh helped start a second CSA. Since then, the number of CSAs in this country has grown to several hundred, operating mostly in the Northeast and in California, with others in the Midwest and the South. They range in size from 25 to more than 200 shares, and prices run from $10 to $35 per weekly delivery or $300 to $800 or more for a season's share. In addition to vegetables and milk, there are CSAs that sell eggs, fruit, meat, and other products.

American CSAs began in the Northeast in the mid-1980s

Farmers often start CSA projects in response to a crisis: a bad year, the closing of a market, encroaching suburban development. Finding consumers to support the farm and become involved in its successes and failures helps small farms stay viable. This is especially true as more consumers become aware of how their food is produced, and as farmers receive smaller percentages of retail food dollars.

Farmers and consumers participate in CSA projects both for short- and long-term benefits. In addition, the larger community benefits from these locally-based initiatives.

Consumers benefit because:

- Their food is fresher than they could get from grocery stores
- They have more control over how their food is produced
- They regain a sense of being connected to the land and to other people

Community Supported Agriculture

Farmers benefit because:

- They know how much and what to produce ahead of time
- The risk of crop loss or low commodity prices is reduced
- They can concentrate on land stewardship and long-term sustainability of their farm operations

Everyone benefits because:

- Money spent on food stays in the local economy
- Use of resources for transportation and packaging is greatly reduced
- CSA promotes cooperation based on personal relationships over competition for customers and prices
- Local markets for farm products contribute to sustainability of area farms

There are hundreds of CSA farms in the US and Canada, with similar projects in Europe and Japan. American CSAs provide thousands of people millions of dollars of fresh, high quality farm products every year.

This handbook can help farmers decide whether to sell their products through CSA, and will provide useful information for *Making the Connection!*

Community Supported Agriculture

This section discusses some things to consider before starting a CSA project.

Is It For YOU?

CSA takes some planning, coordination, and management. It may fit well into your current operation, or you may be looking for a new direction. Here are some areas to consider before starting a CSA:

COMMITMENT

When you start a CSA, you are commiting to supplying your members regularly for a season or a year. Since this is a major undertaking and responsibility, it will be important to have support from your family and/or partners. As in other enterprises and farming in general, making a CSA successful takes time and hard work. However, a CSA farmer can't just quit in the middle of the season.

MANAGEMENT

CSA requires more management and record-keeping than other marketing channels. You need to manage production more closely, especially for CSAs in which you provide food every week. You also need to track budgets and payments.

CONTACT

In CSA, you have more contact with your customers than with other marketing channels. Most farms have their members visit the farm at least once or twice a year, and sometimes every week. For some farmers, this relieves the isolation of farming, while for others it is an annoying disruption.

VARIETY

Especially if you are providing produce, you will need to grow a variety of products. The larger the portion of their food needs you can supply, the more members are committed to the CSA. You should know or learn about a number of crops, animals, and value-added products. You also need a willingness to experiment.

CSA farmers are happier with their work.

Rodale Institute Study (1994)

Community Supported Agriculture

This handbook and a wealth of other information from many sources can help you over any obstacle you run into. Your interest, commitment, and energy are vital to making your CSA successful. The good news is that farmers find CSA worth the effort, according to a Rodale Institute study. When asked to compare CSA to their previous marketing experience, surveyed farmers responded that the economic risk was lower, the time spent marketing was less, and the job satisfaction was greater. In addition, although incomes were still low, they were higher than before and expected to increase.

Community Supported Agriculture

Getting Started

This section describes the two main approaches to CSA projects, and the steps to setting them up.

The first step to starting a CSA project is to find out if people are interested. Talk to people you know at civic groups, schools, churches or farmers' markets. Find out what they would buy through a CSA. Ask them to talk to family members and friends. This initial, informal survey puts the idea of a CSA out in the community, and lets you assess whether a CSA might work.

When you sense enough interest, you can plan your CSA more formally. The kind of CSA you envision affects the approach you take to planning. One approach is **participatory**. Members get involved early in making decisions about the project. They help write the budget, plan the crops and arrange distribution. Usually, a core group, rather than the whole membership, does this planning. A participatory approach really involves people in their food supply, because they help determine how their food is produced, what food will be produced, and learn how much it costs to produce. In some CSAs, members even help grow, harvest and distribute the food.

Another approach is **farmer-directed**, leaving planning to the farmer. CSA becomes more a method of recruiting loyal customers. Members do benefit from fresh products, and do learn about eating seasonally and the risks associated with farming. However, they are less involved with the process that brings them their food. With this approach, the farmer does much of the initial planning before looking for members.

The following are brief descriptions of the steps to creating your CSA. You will find explanations of each step in the rest of this handbook, in the chapters indicated. Both types of CSAs need to accomplish largely the same things, simply in different orders.

Two approaches to CSA:

Participatory
—lots of member involvement

Farmer-directed
—little member involvement

Community Supported Agriculture

PARTICIPATORY CSA

STEPS TO FORMING ONE

For a participatory CSA, planning comes before farming.

Spread the Word (see *Members*)

- Word-of-mouth
- Presentations
- Flyers/brochures

Set Up a Meeting (see *Appendix*)

- Explain CSA
- Show your farm
- Discuss benefits of CSA
- Ask for participation

Form a Core Group (see below and *Members*)

- Made up of three to eight people
- Draws up budget
- Sets guidelines

Draw Up Proposal (see *Members*)

- Crop plan
- Budget
- Payment plan

Obtain Members (see *Members*)

- Write press release
- Distribute Proposal
- Get commitment for shares

Start Farming

CORE GROUP

The core group of three to eight members together with the farmer sets up the CSA. As the farmer, you can decide how much leeway the core group should have. For example, you may want to have total control over the farming, but work with them on distribution. Or, you may want the core group to decide on all aspects of the farming operation, while you act as a consultant on what to grow, when things are available, how much it will cost to farm for these shares, etc.

Members of the core group must be committed to the project. They will need to meet regularly and often *(some meet once a week, especially when putting the Proposal together)*, handle problems as they come up, keep in contact with the members, and ensure that harvest and distribution go smoothly. They should divide up the tasks and responsibilities, and have specific people in charge of each.

More information about core groups and working with members is in the chapter ***Members***.

You will find more information about MEETINGS with members in the appendix.

Community Supported Agriculture

FARMER-DIRECTED CSA

STEPS TO FORMING ONE

A farmer-directed CSA can begin farming before recruiting members.

Make Crop Plan (see *Production for CSA*)

Draw Up Budget (see *Managing the Shares*)

- Figure your costs
- Establish a share price

Write Proposal (see *Members*)

- Who you are
- Harvest plan
- Delivery plan
- Commitment form

Recruit Members (see *Members*)

- Where to find them
- How to reach them
- Getting their commitment

When trying to find out if people might join a marketing CSA, you don't have to work out the details in full. You can tell generally what you plan to produce, how often shares will be distributed, approximately how much participation you would expect from members.

However, when you actually start recruiting members and asking for commitments and money, you should already have decided all the details of what you will grow, how long the season will be, when and where share pick-ups will happen, how share payments will work, etc.

Remember, no matter how you organize your CSA, members and potential members will influence all the decisions about it. They may have direct control, or they may simply make suggestions. Either way, you should listen to them. One of the draws of CSA for consumers is having some say in how their food is produced.

Community Supported Agriculture

This section identifies issues you should consider when designing your CSA.

Designing Your CSA

The core of CSA is that consumers pay up-front and the farmer produces specifically for the CSA members. Beyond that, each project creates its own particular arrangements.

This manual will discuss many of the decisions you will need to make about your CSA. To get you thinking, the next few pages will outline some questions to keep in mind when setting up your CSA. They will also guide you to sections of this manual where you can find more information.

Issues to Consider

How Much Control Will You/Do You Want Over the Project?

You can run the CSA as another aspect of your farm operation, and handle it just as you would handle any other marketing outlet. On the other hand, you can encourage members to take some part in running the CSA. They can help with planning, distribution, or even harvesting. How much they do depends in part on their interest, but also on how much you would like them to do *(see **Getting Started** in this chapter)*.

What Are You Going to Offer Through Your CSA?

Most projects mainly distribute fruits and vegetables. Some also offer eggs and milk, and few even have meat. In addition, you can consider non-edibles, such as flowers, and value-added products, such as dried fruit, jams, garlic braids, etc. *(see **Production for CSA**)*.

How Big Will Your Project Be?

A **share** is the part of the harvest that each member receives. You need to consider how many shares you will offer, and how much each will contain. Typically, a share is

enough for two to five people, depending on the product and the members *(see **Production for CSA**)*.

Who Will Your Members Be?

Your members don't come to you by chance. Whether you realize it or not, you will be looking for certain kinds of people. Determine whom you are trying to attract, and then you can tailor your CSA and your outreach to those people *(see **Members**)*.

For How Many Weeks Will Members Receive Shares?

Some CSAs strive to provide produce year-round, either fresh or from storage. Others only run for part of the year, delivering produce for 30 or 40 weeks *(see **Production for CSA**)*.

How Much Will Shares Cost?

Each of these questions is explored in greater detail in later chapters.

You'll have to take into account how much you are offering members, what you expect of them, how they will pay for shares, and what your needs and costs are to determine a fair share price *(see **Managing the Shares**)*.

Will Members Be Involved in Harvesting the Crops?

Many CSAs have members doing fieldwork, especially for certain crops like beans, pumpkins and berries *(see **Production for CSA**)*.

How Will Your CSA Handle Distribution?

There are many things to decide about distribution: who does it — the farmer, the members, or someone hired for the purpose; will shares be packaged or distributed bulk for members to divide up; will the delivery site be tended like a farmstand or untended *(see **Managing the Shares**)*.

These issues have all been described as separate items, but they are in fact related. As you design your CSA, first mentally and then more concretely, how you decide each one of these issues will affect other ones. You need to keep the whole CSA in mind, from members to payment to planting to harvest, as you put the pieces together.

It may help to look at the whole operation of two example farms — the Vegetable Club CSA in Colfax and Full Belly Farm in Guinda.

Vegetable Club (Colfax)

Dan and Jennifer Crebbin farm using bio-dynamic techniques. When they started their CSA a few years ago, they connected with the local Waldorf school because it, like bio-dynamics, is based on the ideas of Rudolf Steiner, a German philosopher and founder of Anthroposophy. Their members have come from this ready-made connection, or through word-of-mouth.

Members pick up shares at the farm. Half come early in the week, the other half a few days later.

Their CSA is **shareholding** and **farmer-directed**. Members pay for the whole season, which runs from April or May through Thanksgiving. They can pay for their shares all at once in advance, or several times over the course of the year. As long as they receive sufficient start-up money, the Crebbins work with members to create convenient payment plans. There is no core group or mandatory workdays. However, members are often at the farm because that is where they pick up their shares.

Shareholders are divided into two groups with different weekly pick-up days. Twice a week, the Crebbins fill baskets in a small shed near the road with the ready harvest. They post a sign telling members what they can take from each basket: a pound of this, a handful of that, two heads of something else. Members are encouraged to bring their own bags. Because the shed is close to the house and off the main road, it does not need to be tended. Consequently, pick-up times are long, from noon to 7:00 p.m.

They get about 35 shares off the two to three acres in vegetable production, which gives them enough income but isn't enough to require extra help. They also take a few members through the winter, supplying them with crops "stored" in the field. These shares are sold week-to-week.

Full Belly Farm (Guinda)

Full Belly Farm has a larger operation, and their CSAs are only one market outlet. In addition, they sell to retailers and wholesalers. They have CSA members in several cities: Sacramento, Berkeley, San Francisco and Palo Alto, to which they deliver on different days of the week. All told, there are hundreds of members.

These are **subscription** CSAs. However, the Berkeley one was started mainly by one of Full Belly's loyal customers, whereas the others have been **farmer-directed**. In Berkeley, one member wanted to see a CSA servicing her city, so she asked Full Belly to participate, recruited members and keeps the CSA records herself. In Palo Alto, the farmers' market closes for the winter, so the farm has a winter CSA to provide their customers there with fresh, organic vegetables until the market re-opens. In that case, recruiting happened mainly through their regular customers at the market. In Sacramento, the farm connected with a staff person at the *Sacramento Bee*, the daily newspaper, which gave them a large pool of potential members and a drop-off point.

Full Belly publicizes the CSAs by word-of-mouth and with Proposal brochures. They have also been profiled in several newpaper articles.

All shares are packaged at the farm, and then dropped off at several sites in town. They ask members to return the waxed produce boxes the following week for re-use. Usually, these sites are untended, and are a church, front porches, driveways, etc. Shares cost $11 per week, paid four weeks at a time. The weekly share is packed so that it has a value of about $11 dollars at current farmers' market prices. The farm sometimes uses nuts or dried tomatoes or onions to bring the box up to the full value. They also occasionally include fruit which they buy from neighboring organic farms.

While working is not mandatory, volunteer workdays bring members to the farm and teach them about farming. Each fall the farm also hosts a harvest celebration.

Worksheet
Designing Your CSA

It may help you to write down your thoughts on these issues. This worksheet can help you start planning your CSA. These topics are handled in greater detail in later chapters, so you don't need to have final answers here.

1. How much control will you/do you want over the project?

2. What are you going to offer through your CSA?

_____ Vegetables	_____ Eggs
_____ Fruit	_____ Meat
_____ Nuts	_____ Flowers
_____ Milk	_____ Other _____
	_____

3. How big will your project be?

4. Who will your members be?

5. For how many weeks will members receive shares?

Worksheet

Designing Your CSA (continued)

6. How much will shares cost?

7. Will members be involved in harvesting the crops?

8. How will your CSA handle distribution?

Members

"The supportive community in CSA can create the stable dimension of the farm that offsets the instability and unpredictability of nature and economic markets."

—Rowley & Beeman, *Our Field*

CSA brings people into food production by making them members of a specific farm. This relationship is unusual: for farmers, it's a different way of selling; for consumers, a different way of buying.

This chapter discusses how farmers can reach potential members, recruit them, and make them part of the CSA. It covers:

Recruiting Your Members

This section provides information on finding and recruiting members for your CSA.

Recruiting members is a process. You start by deciding who they should be. Then decide where to find them. Finally, make them want to join your CSA.

Who are Your Members?

You already have an idea of the customers you'd like to have. The type of CSA you have in mind, the products you sell, your farm, your own outlook on life all affect who will join.

Do you want to create a participatory CSA? Then you'll need members who have time to work at the farm, help distribute the shares and attend member meetings. Do you plan to grow mesclun, asparagus and five kinds of tomatoes? You'll want members who appreciate these *specialty* products.

Of course, your members won't all be exactly the same. But they must be somewhat alike, or they wouldn't get the same vegetables from the same farm in the same direct-marketing arrangement.

Here are some member characteristics to consider when deciding whom to recruit.

***Member characteristics to consider** (there are more!):*

Household Size

Income

Ethnicity

Gourmet vs. Plain

Number of Meals Eaten Out

Children (how many? ages?)

Urban vs. Rural

Distance from Farm

Other Activities

Willingness to Experiment

Household Size

Small families and singles need smaller shares or easily available half-shares. Large families may want large amounts of a few items, rather than a little bit of many items.

Income

Income will help determine how much and when members are willing to pay. Paying several hundred dollars at once for food to be received in the future takes a certain income.

Community Supported Agriculture

CSAs often change the way their members eat.

Ethnicity

Different cultures have different cuisines. You may find a market **niche** by specializing in Asian, Hispanic, or other ethnically related foods.

Gourmet vs. Plain

Some people only want ordinary food — potatoes, lettuce, broccoli. Others want unusual crops and varieties.

Number of Meals Eaten Out

People or households who eat out often will require smaller shares.

Children

Families with children may have different needs than adults. Familiarity and ease of preparation may be more important. Farm visits which involve children may also interest them more.

Urban vs. Rural

Urban consumers may need more education about how farms operate and seasonality of farm production.

Distance from Farm

Where your members live will affect how you distribute shares. Members who live close can pick up shares at the farm, but those in the city may need the shares to be brought to town, even home-delivered.

Other Activities

Members who are very busy with other activities may not be interested in participating in workdays and share distribution. They also may need more leeway in when they can pick up their shares.

Willingness to Experiment

Some members will take anything you give them as long as you say how it can be cooked. Others only want familiar products, regardless of how tasty or nutritious other products may be.

Finding Your Members

Where do you go to find these members? The profile you've created should give you some hints. Where do people like that live? work? shop? play? eat?

You will find prospective members easily where:

1. People already have a consciousness that fits with CSA, especially with your project, and
2. You have a connection, agriculture-related or not

Consciousness That Fits CSA

- Farmers' markets
- Environmental groups
- Agriculture organizations
- Social justice groups
- Community action groups
- Health-food stores
- Consumer cooperatives
- Health clubs/gyms

Waldorf schools are based on the ideas of Rudolf Steiner, as are biodynamic farms. This shared philosophy makes a natural connection, and many biodynamic farms find members at Waldorf schools.

Your Connections

- Church
- Civic organizations – Kiwanis, Rotary, Key clubs, AARP, Scouts
- Schools
- Ethnicity/nationality

How You Reach Them

Use your imagination to find ways to reach potential members. Once again, consider who they are. What will they respond to? The suggestions that follow are a start. Develop your own tools using your own talents and experience.

Making a personal connection to your farm is the best way to get people interested in your CSA. For this reason, **word-of-mouth** and **prepared presentations** *(like slide shows)* are great for reaching new members. Two other common ways are **creating and circulating a Proposal** and **writing news articles.**

The only thing I will discourage is conventional advertising for an unconventional product. Conventional advertising works fine for conventional products. But if you have something different, then you must look at alternative advertising.

Joel Salatin
"Getting Customers"

Word of Mouth

Excited, happy CSA members will automatically spread the word about CSA and your farm — they won't be able to contain themselves! To help the process along you can offer small thank-you gifts to members who get someone else to sign up. A bouquet of flowers or a dozen eggs is a nice way to say, *"Thanks for bringing us business!"*

Word-of-mouth is the most common way for CSA projects to recruit new members. However, you need to have members already to get new members this way. Still, a few people committed to the project can do wonders for raising interest in the community.

Prepared Presentations

Presentations *(like slide shows)* make a personal appeal to a specific audience, and so are effective for advertising your CSA. Another benefit is that you get immediate feedback about the CSA proposal.

Although you are generating interest in your farm and CSA, don't make your presentation a heavy sales pitch. Educate your audience about agriculture in the U.S., California and Placer County. Talk about CSA, about the social, economic and environmental concerns that it addresses. The idea that people can participate by joining your CSA should be eased in at the end. They will respond better if you teach them something.

You will find more information about Presentations in the appendix.

CREATING AND CIRCULATING A PROPOSAL

Once you have designed a Proposal, use it to spread the word and bring in members.

The Proposal describes the CSA project to prospective members and sparks their interest. Ideally, the Proposal is short; the important information should fit in a brochure or a booklet. It should include:

✓WHAT CSA IS

Say it in your own words, or adapt it from this guidebook or elsewhere.

✓WHAT THE BENEFITS ARE

Let people know why they should join your CSA.

✓WHO YOU ARE

Describe you, your farm, the other people involved. Where is the farm, what do you grow, how long have you been farming, is this a family affair?

✓WHAT MEMBERS GET — WHEN, WHERE AND HOW

Summarize everything about harvest schedule, distribution dates and times, share prices, payment plans, etc. Other chapters of this manual will help you develop this information for your project.

✓HOW MEMBERS ARE INVOLVED

Describe work requirements if you have them, or mention voluntary workdays and harvest festivals.

You can find more information on BROCHURES in the appendix.

✓How Someone Can Get More Information

Say how to reach you, at home or at market. Be sure to include your name, address and telephone number. Also mention other places to look for information on CSA.

✓How Someone Can Join

Include a commitment form with the Proposal pamphlet, or at least a response card to help you build a list of potential members.

Distribute the Proposal anywhere you identified potential members. Stores and other businesses may allow you to put out brochures on their front counters. Find out how to distribute them to school and church communities. In particular, if you are invited anywhere to give a talk or presentation, bring your Proposals, more than you think you might need. They will give people something to take with them and refresh their memories afterward.

Mailing lots of Proposals is probably not worth the expense. However, you might find it worthwhile to mail to a targeted list. A local health food co-op might let you send your proposal out to their members, or include it in one of its mailings. Again, target groups who would be receptive to CSA, or with whom you already have a connection.

A Proposal for a participatory CSA should be more detailed than one for a farmer-directed CSA. Since members will have more control over the farm's production and budgeting, they need to have correspondingly more information to help with their decisions. Include a budget that shows income from shares, capital and operating expenses, and farmer salary.

You will find more information about News Releases in the Appendix.

Writing News Releases

Having a newspaper run an article about your CSA project is cheap advertisement to a large audience. This approach isn't targeted, so you can find potential members you otherwise would have missed.

Writing an effective news release requires sticking to conventions about the style of writing, content, and form the release takes. Information about these conventions is included in the appendix, under ***News Releases***.

Community Supported Agriculture

Recruiting members means getting them excited about CSA and your farm. To sell them on your CSA, remember these things:

- **Sell What You Like** – You need to be committed to the product and enjoy it to sell it effectively. What you like is also what you know the most about.
- **Know Your Audience** – Decide what characteristics best describe your ideal member, so that you can target your message at them. When writing or speaking, know your current audience. Finally, get to know the people who do join your CSA – they may be different from those you originally had in mind.
- **Have A Clear Message** – Choose a few selling points which will make you stand out from the pack, and which will resonate with your audience. Create a logo for your farm, and use it on labels, letters, brochures, newsletters, etc.

Worksheet
Recruiting Your Members

This worksheet will help you start putting your ideas together about your future members.

1. **List some characteristics of your members:**

Where do they live?

What is their income level?

How many people are in the household?

Are there many children?

What are some other characteristics?

Worksheet

Recruiting Your Members (continued)

2. Where will you find people like you have just described?

3. What community connections do you have to help reach members?

4. How will you reach these potential members, and where? *(That is, if you want to hand out Proposal brochures, where will you hand them out?)*

Communicating with Members

This chapter discusses three ways to share information with your members. It also describes how to create newsletters and surveys.

CSA members are not simply buying produce, even if it is tastier and healthier. They are buying participation in their food supply and connection to a farm. At some level they are spending their dollars so that a rural way of life can continue to exist. CSA farmers, therefore, need to foster the connection that members are buying.

Three major ways to communicate with members are:

1. Share notes
2. Newsletters
3. Surveys

CSA members want to participate in their food supply.

Whenever you are communicating with your members in writing, use clear, simple language. Sentences and paragraphs should be short. Use everyday words rather than technical ones.

In addition, have a logo and use it on notes, letters, publications and other written material. Whether it is a picture, a name, a word or a phrase, your logo promotes and advertises your farm. It should capture the essence, or *"feel,"* of your farming operation in a simple visual statement that distinguishes you from everyone else. Keep your logo simple, clean and crisp. Too much detail can distract your customers, obscuring your real theme or message. Also, simpler logos are more likely to reproduce well.

Share Notes

Including a short note with each share is a great way to keep your members up-to-date. It can list the items in the share that week and products that should be available soon. This is also the place to introduce unfamiliar fruits or vegetables and suggest sample recipes. Finally, telling your members something about what is going on at the farm gives them a glimpse into the process that got them this bundle of produce.

Community Supported Agriculture

...Making the Connection

This note doesn't need to be more than a half-page long. You can type it or write it by hand. The purpose is simply to engage your members.

Remember that your members are not farmers; what may seem ordinary to you may be exciting to them. If the seedlings in the greenhouse are doing well, tell them. If you get a new load of compost, tell them that. Here is an example:

SAMPLE

17 Feb. 94

Greetings –

Well, here we are another month into the new year and with another fresh box of organic produce. An item you have not seen recently is the salad mix that is included this week and it is certainly refreshing to have the taste and crispness of lettuce at the dinner table. A new planting of lettuce is finally ready for harvest, so you will probably be seeing more of this tasty treat in future boxes. Enjoy!

Another familiar item you have been receiving lately is the green garlic. This is actually my favorite crop at the farm right now because it is so healthy looking and problem-free. It has most of the potency of dry garlic with just that hint of sweetness one expects from a young tender plant. Let me remind you that the whole stalk is usable, including the green tops!

Often I am asked how to tell the difference between the green onions and the garlic, so I thought I would briefly explain. While it is not a sure sign, usually the garlic has a bit of a reddish tint on a bright white stalk, while the onions are usually yellow to pale green. However, sometimes the onions we send are grown from red onions so they too will sometimes appear red-colored, but they are usually a much deeper red, nearly purple. Secondly, and this is a dead give-away, the garlic has flat green tops whereas the onion tops are tubular, like a straw. Finally, if you want the most pleasurable way to distinguish the two plants, you should smell them. The pungent odor of the garlic almost stings the nose and is sure to bring a smile, while the onions are slightly milder, though still with a bit of the sharpness of an onion.

Until next week, remember that eating organically is important for the health of the planet as well as your body. Enjoy your veggies!

Erik and Full Belly

Today's Box

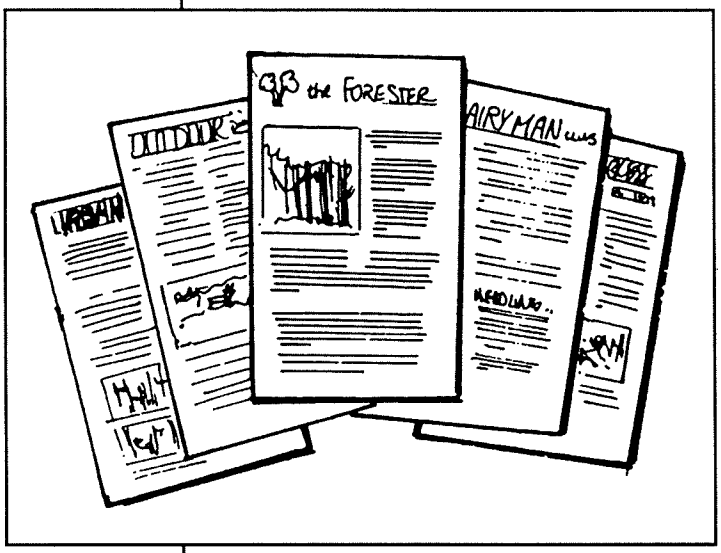
- *butternut squash*
- *green garlic*
- *carrots*
- *dried fruit*
- *collards*
- *red daikon*
- *salad mix*
- *navel oranges*

Used by permission of Full Belly Farm

NEWSLETTERS

Newsletters are short, regularly produced publications. Nearly all CSA farms have them. Like share notes, they let members know what is going on at the farm. However, they come out less frequently than share notes, maybe four times a year. Because you have more time to put one together, you can explain more about the farm, about how you grow the food, about changes that have happened or that you expect. You can also communicate about the CSA, lining up members for the next season, changing drop-off times, and soliciting volunteer help. Some newsletters also include reflections from farmers, workers, or members.

Newsletters are useful for CSAs because they are inexpensive and easy to produce, and their content and tone can be tailored to your audience. On the other hand, they reach a small, select group of people, so they do not create general public awareness of your project or any special events.



Above all, keep it simple. The newsletter is a sideline to the CSA and farming. A one-page general letter to your members that comes out occasionally may be all you are interested in doing.

You will find information about writing NEWSLETTERS in the appendix.

SURVEYS

A survey of your members takes a little more effort, but involves them more in their food supply. It doesn't have to be long. It should get members' thoughts on the size of the share, the selection of items, the quality, and anything else you would like to know about the CSA. For example, if you hosted a harvest day, you might want to ask for feedback about it.

Try to get as many surveys returned as possible. You can collect them where members pick up their shares, or have them mailed in. The more surveys you get back, the greater the variety of responses.

Let members know what you learned from the survey.

Complete the communication loop by writing about the results in the next newsletter. Be sure to say how you are going to respond to the results. If most members say that Tuesday is a bad day for getting shares, then think about changing the day. On the other hand, if one-third say there are too many beets, one-third say not enough, and the rest don't care, then maybe the number of beets is fine. However, let people know that you read and thought about what they wrote.

You will find more information about SURVEYS in the appendix.

Worksheet

Communicating with Members

This worksheet asks you to consider how you will communicate with members.

1. Will you need to let members know about new or unusual products? changes in the CSA? other information?

2. Is your CSA small enough to communicate with everyone by telephone or in person?

3. Do you want to communicate in writing?

4. How often can you prepare a short note? Every week? Once a month?

5. Do you want to do a newsletter? How often?

6. What will you include in a newsletter?

Worksheet

Communicating with Members

(continued)

7. Do you want to survey your members? In writing or verbally?

8. What to you want to learn from your members about their CSA experience?

9. Do you need a short survey or a long one?

10. Do you want help from members with share notes, newsletters or surveys? How much help do you want?

Working with Members

This chapter describes ways members can participate in the CSA.

For just about any task associated with a farm operation, you can find a CSA somewhere that has a member doing it. Working members bring variety and energy to a CSA project. They also bring with them special considerations.

Ways Members Can Work With CSA:

Non-Farming Activities

- *Planning: budgets, crops*
- *Recruiting new members*
- *Writing newsletter, other material*
- *Bookkeeping*
- *Legal consulting*
- *Coordinating social events*
- *Coordinating volunteers*
- *Delivering/distributing shares*

Farming Activities

- *Planting/weeding/harvesting*
- *"Baby-sitting" greenhouse/shadehouse*
- *Preparing shares*

Non-Farming Activities

Members responsible for non-farming activities will probably have some expertise in them. The major issue will be **communication**. You and your members need to keep track of each other's activities and expectations. If you expect a newsletter every three months, the newsletter editor should be aware of this expectation. A volunteer shouldn't hear one message from the volunteer coordinator and another from you.

Responsibility and power should be well balanced. A member who is given responsibility for keeping the books of the CSA, for example, should also have a large say in how the records are kept *(they should, of course, be understandable to the farmer, other members, and the subsequent bookkeeper)*.

Core Group

The core group in a **participatory** CSA (see the ***Introduction***) handles some or all of these non-farming tasks. The core group is three to eight members who commit time and energy to making the CSA run smoothly. They meet often and regularly, sometimes once a week.

The core group can have as much or as little responsibility as the farmer gives them.

What they do depends on the kind of CSA you are creating. They may be involved right from the start, planning what will be produced and helping write the budget. On the other hand, members may be less involved with initial planning, but can still coordinate share delivery or produce the CSA newsletter.

Examples:

One project which has been running since 1991 has in its core group: a construction and parking coordinator (members pick up shares at the farm), a legal consultant, a food resource coordinator, a financial consultant, a volunteer and events coordinator, a publications coordinator, and a couple who do the administrative work.

Another project has these member volunteers: membership coordinator, distribution coordinator, and newsletter editor/publisher.

You will find more information about MEETINGS *in the appendix.*

Participation in Distribution

The most obvious way members can participate in the CSA is in share distribution. Picking up shares at a drop-off point is simple, and involves them in the process. On the other hand, by coming out to the farm, members can witness the seasonal changes. Another way to involve members in share distribution is having them bag their own. You leave the harvest in bulk containers such as boxes or baskets, and they weigh out their shares for the week.

EXAMPLES:

Live Power Farm organizes its shareholders by neighborhood, then has one person pick up the shares for the neighborhood at the produce wholesaler where the shares are dropped off.

Watershed Organic Farm has four pick-up days a week at the farm. Members walk through a produce stand, weighing out their allotment from bins marked with how much they can take.

Several farms have reported that having a short window for people to pick up their shares increases interaction between members. This is especially true if people have to bag their own shares.

FARM ACTIVITIES

With a little effort, you can ensure that your members enjoy working on the farm, and that their time puts you ahead rather than holds you back. The appendix contains tips for training and communicating with working members.

Working on a farm can be a great "day in the country" for city folks.

WORKDAY

You may not have members who help you regularly, but you can still host workdays. One farm which has voluntary workdays reported that members who worked stayed with the CSA more consistently than those who didn't participate. Whether you have a workday once a month or once a year, here are some suggestions to make them more successful:

- **Know what you want to accomplish.** Have your task or tasks clearly in mind, and decide beforehand how you want to do them.
- **Choose something that can be completed.** It helps volunteers to have a sense of completion when they leave the farm, and makes them more willing to return. If you really need something done and it is too big for one workday, break it down into smaller parts that can be finished.

You will find more information about WORKING WITH MEMBERS in the appendix.

- **Have enough tools.** If you don't have them on-site, find more from your members or neighbors.
- **Celebrate when you get finished.** Get something to drink and relax a bit, go for a swim, have dinner, etc.

Examples of workday tasks include: planting an orchard; putting in a fence; picking beans, peas, or pumpkins; painting the barn.

Harvest Celebration

For that matter, any way of bringing members to the farm increases their understanding of how they get their food. Many CSAs have a harvest day towards the end of the season. Take members on a tour to explain the different aspects of the farm and how it works. Explain about compost and how it helps the soil. Show where the land is low, helping them understand when it gets flooded.

Arrange for members to work together at something which isn't too difficult — have them pick pumpkins, for example. After a few hours of work, they'll be hungry, so finish the harvest day with a potluck. Add some games and music for more enjoyment.

Remember that making these connections between the farm and members is part of a CSA project. Whether you look at it as building community or as cultivating consumer loyalty and support, making members feel part of the project is essential to its long-term success. Remember, too, that different people want different levels of involvement. Some will be satisfied receiving their shares and an occasional note, while others may want to help write the newsletter or organize the membership. Those energetic people are a great resource for the CSA. At the same time, don't begrudge your non-involved members *(as long as they pay their shares!)*.

Worksheet
Working with Members

This worksheet will help you start thinking about the work members will do in your CSA.

1. Will members be involved in non-farming activities?

   How?

2. Will members be involved in farming activities?

   How?

3. Will your CSA have a core group?

   What will it do?

Worksheet

Working with Members (continued)

4. Will you have workdays or celebrations at your farm?

   Who will organize them?

5. Will members be required to work?

   How much?

Community Supported Agriculture ...*Making the Connection*

Member Survey

(Short Form) • Year: _____

1. How important were the following in your initial decision to become a CSA member? *(place check mark under appropriate column)*

Factor	Not Important	Little Bit Important	Somewhat Important	Important	Very Important
Price					
Fresh, tasty products					
Chemical-free products					
Environmental concerns *(soil, water, wildlife, etc.)*					
Novelty					
Supporting a local farmer *(sharing the risk)*					
Visiting/connecting with a farm					
Convenience					
Community involvement					
Knowing where and how the food is produced					

2. On the whole, what do you think was the net financial effect of your participation in CSA, as compared to shopping in a store?

_____ Saved money _____ Cost Money _____ About equal

Member Survey
Short Form (continued)

3. How well do you feel the growers did at providing:

ITEM	POORLY	2	3	4	EXCELLENTLY
Quality products					
Consistent supply					
Enough variety					
Fresh foods					
Interesting items					
Products that fit your diet and lifestyle					
Other: _____					

4. Please evaluate the following:

ITEM	POOR	2	3	4	EXCELLENT
Presentation of products					
Member/grower communication					
Convenience of pick-up point location					
Convenience of pick-up time/day(s)					
Other: _____					

5. Are you interested in renewing your share for next season?

_____ YES _____ NO

Community Supported Agriculture ...*Making the Connection*

Member Survey

(Long Form) • Year: _____

1. Had you heard of CSA/Subscription Farming before this experience?

   _____ YES _____ NO

   Where?

2. How important were the following in your initial decision to become a CSA member? *(place check mark under appropriate column)*

Factor	Not Important	Little Bit Important	Somewhat Important	Important	Very Important
Price					
Fresh, tasty products					
Chemical-free products					
Environmental concerns *(soil, water, wildlife, etc.)*					
Novelty					
Supporting a local farmer *(sharing the risk)*					
Visiting/connecting with a farm					
Convenience					
Community involvement					
Knowing where and how the food is produced					

3. On the whole, what do you think was the net financial effect of your participation in CSA, as compared to shopping in a store?

   _____ Saved money _____ Cost Money _____ About equal

(Continued on next page)

Member Survey
Long Form (continued)

4. How well do you feel the growers did at providing:

ITEM	POORLY	2	3	4	EXCELLENTLY
Quality products					
Consistent supply					
Enough variety					
Fresh foods					
Interesting items					
Products that fit your diet and lifestyle					
Other: _____					

5. Please evaluate the following:

ITEM	POOR	2	3	4	EXCELLENT
Presentation of products					
Member/grower communication					
Convenience of pick-up point location					
Convenience of pick-up time/day(s)					
Other: _____					

6. Are you interested in renewing your share for next season?

_____ YES _____ NO

If NO, why not?

(Continued on next page)

Member Survey

Long Form (continued)

7. In the future, would you be willing to donate money towards a share for a low-income household?

   _____ YES _____ NO

   If YES, how much? $10 $20 $25 $50 Other _____

8. What two items would you like to see MORE of?

   _____ _____

9. What two items would you like to see LESS of?

   _____ _____

10. What additional items should the CSA offer?

11. Would you like to participate in any of the following aspects of CSA?

   _____ Being a part of a "core group" to coordinate the CSA
   _____ Estimating the price of a share
   _____ Creating the list of what is grown
   _____ Raising additional funds
   _____ Choosing the pick-up dates
   _____ Hosting a pick-up site
   _____ Planting/weeding/harvesting
   _____ Organizing social events
   _____ Writing for the newsletter
   _____ Baby-sitting the farm for a day *(watering, checking greenhouse, caring for animals, etc.)*

(Continued on next page)

Member Survey

Long Form (continued)

12. If you could, what would you change about the CSA relationship and why?

13. Do you garden at home/in a community garden?

_____ YES _____ NO

14. Do you process any food at home *(canning, freezing, drying)*?

_____ YES _____ NO

15. What is the most important aspect of CSA for you?

Please feel free to make additional comments:

Production for CSA

"I don't think our CSA would have been as successful if we hadn't already been farming for a few years. We knew what grew well on our land and what people liked at the market."

—Sue Temple, *Fiddler's Green Farm*

CSA members learn to accept the constraints faced by a farm, and that they can't have sweet corn in April. However, they won't be satisfied with only one or two choices of vegetables per week, and most won't know what to do if you give them 20 pounds of cabbage all at once. To help guide farmers through the issues of producing for a CSA, this chapter covers:

Community Supported Agriculture

This section includes information to help you decide what to provide and how and when to provide it.

Creating Your Harvest Plan

Prospective members will want to know what they can expect from the CSA. You need to tell them what you will raise, when it will be ready, and how much they can expect to receive.

This section will help you plan your shares. There are questions to consider which apply to all CSA projects, as well as specific information for CSAs which provide produce. The next two sections discuss crop production and animal products.

The major issues when planning production for your CSA are:

- What are you going to provide?
- How long is your season?
- How many people can/will you support?
- How will you organize your harvest?

What Are You Going to Provide?

Potential items for your CSA:

Fruits
Vegetables
Nuts
Beef
Poultry
Other Meats
Milk
Eggs
Flowers

CSA projects can and do provide nearly anything. Most CSAs raise a variety of products. By providing members with as large a part of their diet as possible, you invest them more in the project and your farm. In addition, diversifying your production can spread your work out over the season. Choose some products which need the most work in the spring, and others which you handle in the summer and fall. Diversification also reduces your dependence on any one product. If one should fail, there are others to fall back on.

Animal Products

If you are offering shares from a diversified farm, then it is best to have separate arrangements for each type of product. One CSA arrangement distributes the fruits and vegetables,

Animal products are more regulated than fruits and vegetables.

another sells the milk, another the eggs, etc. Of course, many members will overlap. The point is to offer them separately because of people's dietary habits. When you offer them separately, then you need to account for the costs separately, too. You can also have discounts for, say, your egg buyers who are members of the produce CSA, too.

EXAMPLE:

Your farm supplies 55 shares at $110 per quarter per share. In addition, 22 members are part of your egg CSA, and pay $20 per quarter to receive about a dozen eggs per week.

WHAT TYPES OF SHARES WILL YOU OFFER?

You do not have to offer only one type of share. Many CSAs offer two or even three types. They vary by type of products, size and seasonality.

BASIC & GOURMET

One way to cater to customers is to offer different styles of produce shares. Some CSAs offer both **"Basic"** and **"Gourmet"** shares. The Basic share concentrates on produce used most often by Americans: potatoes, onions, broccoli, tomatoes, peppers, lettuce, etc. The Gourmet share has all these items, but also includes the less familiar: arugula *(rocket)*, jicima, Japanese eggplant, kohlrabi, fresh herbs, etc. Generally, the amount of food in each type of share is about the same. However, because of the specialty vegetables, you can charge more for a Gourmet share.

SIZE

Another aspect of the share to vary is the size. Nearly all CSAs offer both whole shares and half shares *(some even quarter shares)*. The whole share might be enough for a family of four or five, whereas the half share might feed two or three, or a larger household that eats fewer vegetables.

With half shares *(and quarter shares)*, you need to decide how much to charge and who will divide the shares. If your members are participating in creating the CSA, including the payment schedule, then they will help make this decision. If you are putting the CSA together, then here are some suggestions:

Balance your members' needs and your own — you can't do everything.

Price

Most CSAs who have half shares charge a more than half the price of a full share. If a full share is $500, a half share might be $260 or $270. This pays for the extra administrative costs.

Dividing

Either you can divide the whole share into halves, that is, pack half shares separately, or you can pair all the half-sharers together, and let them be responsible for dividing the share. **Remember that you cannot do everything for your members.** Dividing shares takes time away from other things, whereas letting them divide the shares fosters contact between members.

Seasonal Shares

A final way of offering different types of shares is to have seasonal shares. Some people may enjoy growing a summer garden, but find planning for the winter too much of a hassle. You may also find that you want to supply fewer people in the winter than in the summer. In these cases, you can break down your shares into Summer and Winter, or Year-round and Winter only. You will also need to figure out the share prices separately.

How Long is Your Season?

The length of your season is first determined by what you are offering. However, there are many techniques and strategies for extending the harvest season.

Given these methods of season extension, the length of your season is also determined by your interest. Even if you can grow produce year-round, you may still want to take some time off in the winter. In addition, you can manage your crops so that you

fill winter shares with previously harvested produce from cold storage.

The next chapter includes suggestions for maintaining a constant harvest throughout your growing season.

At any rate, you should have a good idea of how many weeks in the year you intend to offer shares, and inform members of this from the start.

How Many People Can and Will You Support?

How many people you provide with shares depends on how much land you will farm and how much it can produce. **Produce CSAs provide between five and fifteen pounds of fruits and vegetables per share per week, averaging about ten pounds.** This is a very general figure. Share weights change a lot from season to season, and also from project to project.

Another measure of how much to offer is produce value. **Share prices tend to be between $10 and $15 per week per share.**

CSAs provide an average of ten pounds of produce per week.

Share prices tend to be between $10 and $15 per week.

For other products, you'll need to find out how much your members consume. They might use a half-dozen eggs per person per week, or just a couple. They might need a gallon of milk, or a pint. Meat consumption will also be very different.

The following table gives some information about produce shares. It shows how much CSAs offer per share for different items. These are total values, that is, how much the CSAs gave their members per share over the whole season, whether it was 28 weeks or the whole year. In addition, CSAs don't generally provide all these items.

Some of the numbers were figured from lists that CSAs around the country have made available. Some numbers are from a Rodale Institute study in the eastern US. Others are from the CSA project at the Waldorf School in Davis, California. As you can see, the results were very different. The best they can do is give you a starting point for planning your CSA.

Community Supported Agriculture

...Making the Connection

Total Amounts Members Received for Their Shares

This table gives total amounts for each produce item that members received over the whole season.

These numbers are from several sources, and are offered as a suggestion for planning CSA production.

	AMOUNTS PER SEASON				
Crop	Average Per Share (#)	Range Per Share (#)	Average Rodale Study (#)	Projected Davis Waldorf School (#)	Comments
Alfalfa sprouts	2	1 – 4	2.8 (all sprouts)	–	
Arugula	3.5	2 – 5	0.1	7	
Asparagus	5	2 – 10	0.6	–	
Basil	6	2 – 15	1.1	6	
Beans, dry	–	–	0.5	–	
Beans, gr	14	5 – 20	23.7	24	pole and bush
Beans, wax	–	–	2.2	–	
Beets	18	10 – 30	1.3	48	roots and greens
Bok choi, pak choi	5	3 –10	1.7	20	includes tat soi
Broccoli	15	10 – 20	4.2	42	
Brussel sprouts	5	2 – 10	0.1	–	
Cabbage, chinese	10	5 – 20	4.3	12	
Cabbage, green	14	5 – 20	30.5	12	
Cabbage, red	3	2 – 10	–	–	
Cantelope	11	3 – 15	–	36	
Carrots	40	20 – 80	6.5	88	
Cauliflower	6	5 – 10	–	28	
Celery	6	2 – 10	–	–	
Chard	10	5 –15	2.1	10	
Corn	6 doz	2 – 12 doz	–	4 doz	
Cucumbers	14	5 – 25	4.4	40	
Daikon	1	1 – 5	–	–	
Eggplant	4	2 – 10	13.2	16	
Fennel	1	1 – 3	0.2	–	
Garlic	2.5	1 – 5	0.6	8	
Herbs	14 bun	5 – 25 bun	2	12	cilantro, dill, tarragon, rosemary, etc.
Kale and collards	8	5 – 15	1.7	26	weights added together if CSA produced both
Kohlrabi	4	2 – 10	–	40	
Leeks	7	2 – 10	–	40	
Lettuce	37 ea	20 – 60 ea	9.2 (inc. Romaine)	64 ea	
Mustard	5	2 – 15	–	5	
Onions, bunch	9 bun	4 – 15 bun	–	–	

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 **(916) 889-7385** • FAX (916) 889-7397

No farm produced all these items.

Crop	Average Per Share (#)	Range Per Share (#)	Average Rodale Study (#)	Projected Davis Waldorf School (#)	Comments
	AMOUNTS PER SEASON				
Onions, dry	27	10 – 60	19	24	when not specified, assumed dry onions
Parsley	5	1 – 10	–	9	
Parsnips	6	5 – 15	–	–	
Peaches	–	–	2.7	–	
Pears	–	–	5.5	–	
Peas, sugar	8	2 – 20	5	24	
Peppers, sweet	8	5 – 15	4.8	48	
Peppers, hot	1	0.5 – 2.0	0.6	4	
Potatoes	55	20 – 100	45	48	
Pumpkins	2 ea	1 – 5 ea	–	20	
Radishes	14 bun	2 – 20 bun	1.8	10 doz	
Rutabagas	10	5 – 15	–	12	
Salad mix	20	5 – 25	2	–	
Spinach	10	5 – 25	2.2	12	
Squash, summer	19	15 – 30	0.9	60	
Squash, winter	35	5 –70	0.4	36	
Strawberries	–	–	3.3	–	
Sweet potatoes	10	5 – 25	–	–	
Tomatoes, slice	35	10 – 80	52.5	40	
Tomatoes, cherry	–	–	–	–	
Turnips	5	2 – 15	1.4	64	roots and greens
Watermelons	6	2 – 10	–	24	

Columns 2 and 3 from these farms:

Sample midwest farm (***Community Related Agriculture***. Kimberton, PA: Bio-dynamic Farming and Gardening Association, Inc., 1990)

Simpleton Farm, OR (in Jered Lawson. ***Community Supported Agriculture; A Reader.*** Unpublished, 1992.)

Smokey House Project, VT (in Lawson.)

Snow Baker Farm, VT (in Lawson.)

Kimberton, PA (Trauger Groh and Steven McFadden. ***Farms of Tomorrow***. Kimberton, PA: Bio-dynamic Farming and Gardening Association, Inc., 1990.)

Moore Ranch, CA coast (in Lawson.)

Column 4 from:

Rochelle Kelvin. ***Community Supported Agriculture on the Urban Fringe***. Kutztown, PA:Rodale Institute Research Center, 1994.

Column 5 from:

Kimi Walsh at Garden Moon Farm, Davis Waldorf School.

Community Supported Agriculture

WHO DOES THE HARVESTING?

This may seem obvious: ***the farmer harvests the crops.*** However, many CSAs have members help harvest at one time or another.

For some, working members help in the field regularly. They may come for two to four hours a week, for example on harvest day to help get the shares ready. This regular help alleviates the labor crunch that the farmer faces at key times.

Other CSAs use members just to harvest some crops. These crops fall into several categories:

Members who participate tend to stick with the CSA.

LABOR-INTENSIVE

Quite a number of CSAs have members harvest green beans and peas, because the farmer's labor is better spent in other activities. A compromise approach is to harvest maybe a half-pound per share, and allow those who want more to pick the rest themselves.

SPECIALTY

For high-value, delicate, or special products, you might have members pick their own. One example is flowers. You might grow flowers to attract beneficial insects, then let members who come to the farm pick bouquets from these insectary patches. Another common example is berries. You may not want to pick raspberries or blackberries for everyone, but you can grow them (or direct members to the wild ones) and let people pick what they want.

OCCASIONAL

One occasional crop is Jack-o-lantern pumpkins. You can grow a patch for your big harvest celebration, then turn the kids *(and adults)* loose to find just the right pumpkin for Halloween. The other example of occasional harvesting is when the farm has a crisis. If a freeze is coming, you can mobilize several members to help you bring in a crop for storage so you don't lose it to the cold. Since the harvest is not ***yours*** but belongs to the whole membership, some members will be willing to help save ***their*** crop.

If you have speciality or occasional crops, you should decide whether they are included in the share price or they need to be paid for separately *(as in a U-pick operation)*.

All of these options bring CSA members to your farm. They will need to be shown where to pick, what ripe products look like, and how to pick them. They will also need to know about farm safety, about how to behave around animals and tractors and how to use tools safely. For information on these and related issues, see the chapter titled ***Members***.

When Do You Harvest?

Several questions to consider are: which day of the week will you harvest? what time of day? when will you harvest winter storage vegetables?

Deciding when to harvest goes along with deciding when to deliver. If you deliver 50 shares on Tuesday evening to a city an hour away, then you can harvest Tuesday morning. If you make early-morning deliveries, especially to someplace farther away, then you will probably want to harvest the day before.

Note, too, that harvesting in the morning is preferred. Produce has less field heat in the morning. You need less energy for subsequent cooling and the produce has a longer post-harvest storage life.

How Will This Fit Other Farm Operations?

Creating a CSA arrangement that fits your farm means considering crop choices, harvest strategies and handling methods.

Crop Choices

You can approach CSA crop choices from two directions. You can use the project to diversify your production, for example moving into vegetable crops instead of producing tree fruit exclusively. Alternatively, you can raise the same things, but sell them through a CSA as well as your other outlets.

HARVEST STRATEGIES

You need to manage your harvest so that products leave your farm fresh and ripe. You should also make certain that you have enough products to fill all your shares each delivery date.

Many crops need to be harvested often for peak quality. If your CSA only picks up shares once a week, and you need to harvest several times a week, then you need to plan how to handle these other harvests. You can:

1. Have two *(or more)* pick-up days, and divide your CSA members so that some pick up on one day and others pick up three or four days later.
2. Plan the CSA share day to balance out other marketing channels. If share pick-up is Friday, then on Monday or Tuesday do a farmers' market, or deliver to a wholesaler or retailers. This **marketing diversity** helps stabilize your farm income.
3. Store the harvest until pick-up day. For more help, see ***Crop Production for CSA*** *(pages 14 to 25)*.

As for filling all your shares, this is only an issue for **subscription** CSAs. For **shareholding** CSAs, you divide up whatever is ready between your members. How much they get depends on the harvest. Subscription arrangements, however, pledge a share of a certain dollar value. You need to monitor your crops closely to be certain to have enough to fill these share commitments.

Two strategies to make it easier to fill your subscription shares are:

- ✓ Have other marketing outlets
- ✓ Have a reserve of less perishable products

If you sell through other outlets, you can add or subtract what you sell there to be certain to fill all your shares. Having a reserve of less perishable products, such as dried fruit, nuts or storage fruits and vegetables *(garlic, onions, apples)* allows you to add these items if necessary to bring the share up to its promised value.

HANDLING METHODS

If you sell through the CSA in addition to other outlets, you may encounter different standards from the different buyers. Boxes may need to be packed differently, some outlets need products to be graded and some buyers have very specific quality demands.

You can learn the needs of your clients and work to meet them, which takes management and a good memory but also provides solid market diversification for your farm. On the other hand, you can choose outlets whose requirements are similar to those of a CSA, reducing the number of differences you handle.

Plan your CSA and other outlets so as to harvest often, for peak produce quality.

Farmers' markets come to mind first. Like CSA members, market customers expect products to be minimally processed. In addition, both outlets don't use a *"standard pack"* like wholesalers and retailers require.

Growers counsel against saving the seconds and culls for your CSA while you send the best products to other buyers. To establish a solid reputation and the goodwill of your members, you need to provide them with the best that you can. Part of the strength of the CSA arrangement is that you give your members everything from the field, including the odd-sized and slightly blemished stuff. However, they need to get the grade A's, too.

To establish a solid reputation and the goodwill of your members, you need to provide them with the best you can.

By now, you should have an idea of the kind of shares you will offer, how many you can supply, what you will provide, the length of your season, whether you want to sell all your production through CSA, and how CSA will fit into your farming operation.

Community Supported Agriculture

...Making the Connection

Worksheet

Creating Your Harvest Plan

This worksheet give you space to start creating a harvest plan for your CSA.

1. What products are you going to provide?

2. Will you offer more than one kind of share? What kinds?

3. How many weeks long is your harvest season?

4. How many shares will you offer?

5. Do you have enough land to grow for that many shares? If not, how will you get more land?

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 **(916) 889-7385** • FAX (916) 889-7397

Worksheet

Create Your Harvest Plan

(continued)

6. Will members be involved in harvesting? How?

7. When will you harvest? *(Time of day, day of week)*

8. Will you sell only through CSA, or also through other outlets?

9. Will this allow you to harvest and distribute several times a week?

10. How do you plan to have enough for all shares each week?

Crop Production for CSA

This section explains how to provide produce for a CSA, with information on growing, handling and storing.

By now, you have decided what you are providing through your CSA. Next, you need to think about how you will provide those products. There are several issues that come up when you provide fruits and vegetables through a CSA:

- How much to produce
- Techniques for a consistent supply
- Post-harvest handling

How Much to Produce

The table from the last chapter, ***Total Amounts Members Received for Their Shares***, gave sample amounts per share for some fifty fruits and vegetables. You will probably not produce all of these. However, you will raise a number of them, and should keep the following in mind:

- Have at least five or six and as many as ten or twelve types of produce each week in the share. This variety makes a healthy diet for your members, and keeps their interest.
- To have a number of products each week, grow an even greater number of crops, to compensate for slow growth, crop loss, or crops which are available only bi-weekly. If you want to have about eight produce items each week, you may want to be growing 10 or 12 crops.
- With a **shareholding** CSA, harvest what is available that week and divide it among the members. With a **subscription** CSA, in which the value of the shares is pre-determined, use the market price of the produce to assemble a box of the correct value. Strategies for having enough on hand are on page 3 – 6 and 3 – 7 in ***Creating Your Harvest Plan***.

Here are examples of shares from all four seasons from Full Belly Farm in Yolo County, which runs subscription CSAs in Sacramento and the Bay Area:

A One-Week Share For

February	May	August	November
1 lb broccoli	1 bunch beets	1 bunch basil	1 lb walnuts
1 red cabbage	2 lb broccoli	1 bunch long beans	1 bunch turnips
1 bunch collards	1 bunch carrots	3 cucumbers	1 bunch beets
1 bunch fresh garlic	1 head lettuce	1 bulb garlic	2 heads lettuce
1 bunch red kale	1 lb potatoes	1 passport melon	1 bunch green onions
1 bunch leeks	1 bunch spinach	1 yellow watermelon	1 butternut squash
½ lb walnuts	1 bunch green onions	1 lb tomatoes	2 lbs potatoes
½ lb salad mix	½ lb sugar snap peas	1 lb zucchini	1 bunch red kale
			1 napa cabbage

The next two pages contain a list of yield data from a few different sources.

By looking at the ***Total Amounts Members Received for Their Shares*** table *(pages 3 – 6 and 3 – 7)* and the ***Crop Yield Information*** table on the following pages, you should have an idea of how much you need to plant for the number of shares in your CSA.

The best teacher for your farm is your own experience.

Also, at the end of this chapter are several Charts to help you plan your CSA.

You can find this type of information for yourself in agricultural books, Cooperative Extension publications, and seed catalogues.

The yield data is only an indication, not a guarantee. Yields are influenced by a large number of factors, and are unpredictable. You need to experiment with your farm, its microclimates, and different growing techniques to find out what you can produce.

Community Supported Agriculture

Crop Yield Information

Crop	Growing Your Own Vegetables		Knott's (pages 334-335)		Johnny's Selected Seeds
	Planting/ Person	Yield/Season– 100' Row (#)	US Yield, Cwt/Acre*		1995 Comm. Catalogue
			Average	Good	Avg yield/100'
Asparagus	10 –15 plants	30	25	40	–
Beans, dry	–	–	–	–	8 lbs
Beans, green	15 – 16' bush/ 5 – 6' pole	120 –150	35	100	80 lbs bush/ 150 lbs pole
Beets	5 – 10 feet	150	140	200	40 lbs greens/ 100 lbs roots
Bok choi, pak choi	–	–	–	–	100 lbs
Broccoli	3 – 5 plants	100	95	120	75 lbs
Brussel sprouts	2 – 5 plants	75	140	175	60 lbs
Cabbage, chinese	3 – 10 feet	80 ea	–	–	60 ea
Cabbage, green	3 – 4 plants	150	235	300	60 ea
Cabbage, red	–	–	–	–	–
Cantaloupe	6 – 15 plants	100 ea	145	200	100 ea
Carrots	5 – 10 feet	100	260	350	100 lbs
Cauliflower	3 – 5 plants	100	105	150	60 ea
Celeriac	3 – 5 feet	–	–	–	60 lbs
Celery	10 plants	180 plants	535	700	100 ea
Chard	3 – 5 plants	75	–	150	–
Corn	10 – 15 feet	10 doz	80	120	8 doz
Cucumbers	2 – 9 plants	120	115	250	120 lbs
Daikon	–	–	–	–	200 ea
Eggplant	1 – 2 plants	100	190	250	75 lbs
Fennel	3 – 5 feet	–	–	–	–
Garlic	–	40	130	160	–
Kale and collards	5 – 10 feet	100	–	–	75 lbs
Kohlrabi	3 – 5 feet	75	–	–	50 lbs
Leeks	2 – 5 feet	–	–	–	150 ea
Lettuce	10 feet	50	280	400	50 lbs
Mustard	5 – 10 feet	100	–	–	100 lbs
Okra	3 – 10 feet	–	–	150	–
Onions, bunch	3 – 5 feet	–	–	–	100 lbs
Onions, dry	3 – 5 feet	100	340	500	100 lbs
Parsley	1 – 2 plants	30	–	–	30 lbs
Parsnips	10 feet	100	–	–	75 lbs
Peas, sugar	10 – 20 feet	20	40	60	20 lbs
Peppers, sweet	3 – 5 plants	60	100	200	–
Peppers, hot	–	–	40 *(dried)*	60 *(dried)*	–
Potatoes	10 – 50 feet	100	290	400	–
Pumpkins	1 – 2 plants	100	–	400	300 lbs

These yield data are a starting point — but no substitute for measuring the production of your own farm.

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Crop	*Growing Your Own Vegetables* Planting/ Person	Yield/Season– 100' Row (#)	*Knott's* (pages 334-335) US Yield, Cwt/Acre* Average	Good	*Johnny's Selected Seeds* 1995 Comm. Catalogue Avg yield/100'
Radishes	2 – 5 feet	100 bun	–	–	100 bun
Rutabagas	3 – 5 feet	–	–	400	150 lbs
Spinach	5 – 10 feet	40 – 50	80	150	40 lbs
Squash, summer	2 – 3 plants	150	–	300	200 lbs
Squash, winter	1 – 3 plants	100	–	400	200 lbs
Strawberries	–	–	225	400	–
Sweet potatoes	5 – 10 plants	100	125	250	–
Tomatoes, slice and salad	3 – 5 plants	100	230	270	150 lbs
Turnips	5 – 10 feet	50 – 100	–	300	100 lbs gr/ 50 lbs roots
Watermelons	2 – 6 plants	40 ea	125	300	70 ea

Columns 2 and 3 from:

Growing Your Own Vegetables. USDA, Agriculture Information Bulletin 409, Part 2, Home Garden Vegetables, 1977; and

Pittenger, Dennis R. ***Home Vegetable Gardening***. University of California Cooperative Extension, Division of Agriculture and Natural Resources, 1992.

Columns 4 and 5 are from:

Lorenz, Oscar A. and Donald M. Maynard. ***Knott's Handbook for Vegetable Growers,*** *3rd edition.* John Wiley & Sons, Inc., New York, 1988.

Column 6 is from:

Johnny's Selected Seeds, ***1995 Commercial Edition*** catalogue.

*Conversion Factor for Estimating Plantings

[To change cwt/acre into lbs/100', divide the amount in column 4 or 5 by the appropriate value from the spacings table below]

Row Spacing (inches)	Conversion Factor
12	4.4
15	3.5
18	2.9
20	2.6
21	2.5
24	2.2
30	1.7
36	1.5
40	1.3
42	1.2
48	1.1

(Adapted from ***Knott's Handbook for Vegetable Growers***)

Useful techniques:

Don't grow uniform varieties

Grow bolt resistant varieties

Choose different maturity times

Use succession planting

Extend the harvest seasons

Store crops

Techniques For A Consistent Supply

CSA members want to receive a steady supply of produce throughout the season. It is difficult if their shares have ten pounds of broccoli one week, and then no more for two months. The exception to this is the members who are canning, drying or freezing fruits and vegetables. You can make arrangements to supply large amounts for preservation for those who want it.

Therefore, you as the farmer need to grow your produce so that it is ready for harvest a little at a time. Several techniques and choices help with this, and are even more effective when used together:

Don't Grow Uniform Varieties

Commercial varieties of tomatoes, beans and other crops are often bred to be uniform. All the fruits on the plant are ready for harvest at the same time, to make harvesting by machine or picking crews efficient.

However, there are other varieties, which produce and mature fruits over a period of time. If you are harvesting by hand, you can choose the ripe ones, then return later when more are ready. You only need to plant once for a harvest which extends over several weeks.

You can find this information in the variety descriptions in seed catalogues.

Grow Varieties Which are Slow to Bolt

Varieties have different tendencies to **bolt**, in response to their environment. Choose ones that are **slow to bolt** for your climate and for the time you are growing them. You can leave the crop in the field and harvest a little at a time as you need it. This is especially true of lettuce, brassicas *(cole crops)*, onions, and greens.

Seed catalogues will tell you if a variety is slow to bolt or bolt-resistant.

In most of Placer County, you can harvest 12 months of the year.

Choose Varieties with Different Times to Maturity

Varieties also vary by how long they take to reach maturity. Choose **several varieties with different maturity dates.** You can plant them all on the same day, so you only have to get the seeds and seeder out once. However, they will be ready at different times, giving you an extended harvest.

Seed catalogues give information on dates to maturity for their varieties. Dates to maturity may well vary, however, according to climate and weather. The information on ***relative*** time frames is still useful.

Use Succession Planting

Most crops have a fairly long planting season in California. By **planting several times during that season**, you can have a continual harvest.

The number of times to plant varies by crop. Greens, for example, allow you to harvest several times from the same stand, so they only need to be planted once a month. Radishes, on the other hand, have a short window of maturity, and you can only pick each plant once. Therefore, they need to be planted more often, every two weeks. The ***Harvest Information*** table in this section gives a range of weeks to maturity, and tips for succession planting.

Extend Your Seasons

Season extension is using strategies, techniques and equipment to harvest earlier in the spring and later in the fall than usual. Two major elements of season extension can help the CSA farmer. The first is **soil and climatic factors**, and the second is **plant and soil covers.**

Soil and climatic factors are often overlooked in efforts to extend harvests. You can use your knowledge of your farm to choose the best places for early and late crops.

Soils which drain quickly and well are better for the first planting of the season or for overwintering crops. Sandy soils and soils on slopes drain more quickly than clay soils and

bottom lands. They are accessible for groundwork and planting early in the spring.

Temperature *(microclimate)* differences can be significant on most foothill farms. Differences of 10°F or more are not uncommon between high and low ground, especially where slope or North-South orientation differs.

Plant and soil covers, such as mulches, row covers, cloches, cold frames and greenhouses, change the soil and air temperatures around the plant. Some are expensive, some are not, and they also vary in their effectiveness. They can, however, help you protect plants from cold and frost, exclude pest insects, suppress weeds, and promote growth of out-of-season plants.

Have Storage Capabilities

Finally, you can **extend the length of time you supply your members with shares not just by growing well, but also by storing well.** You can offer them winter shares from stored fruits and vegetables, and extend the number of weeks in your CSA significantly.

First of all, in most of Placer County, crops can be "stored" in the field during the winter. Plant growth may slow or stop, but freezes and frosts don't come along to kill the plants. Therefore, you can keep them in the field until you are ready to harvest. This works especially well with roots crops, such as carrots, beets, turnips, etc.

Second, you can build storage facilities. However, crops vary in their optimum storage environments.

You will find information on Post Harvest Handling and Small-Scale Cold Rooms for Perishable Commodities in the appendix.

Community Supported Agriculture

**The Vegetable Club CSA in Colfax plants these vegetables only once or twice for a full-season continual harvest.*

Harvest Information

Vegetable	Approx. Weeks to Maturity	Approx. Length of Harvest (up to) in Weeks	Suggested Planting Cycle for Continuous Harvest
Artichoke, Jerusalem	17 – 26	dig as needed	harvest as needed; store in ground in winter
Asparagus	2 – 3 years	–	–
Basil	12	12 – 16	2 to 4 plantings
Beans, snap (bush)	7 – 9	4 – 6	10 days to 2 week intervals
Beans, snap (pole)	8 – 10	12	10 days to 2 week intervals
Beans, shell (kidney, soy, etc.)	11 – 15	when dry	–
Beets	8 – 9	dig as needed	2 week intervals*
Bok choy	8	8	2 to 3 week intervals
Broccoli	8 – 9	4 – 6	2 to 3 week intervals
Brussels sprouts	11 – 13	12	–
Cabbage (green & red)	9 – 14	(A)	3 week intervals
Cabbage, chinese	9 – 11	(A)	3 week intervals
Cantaloupe, etc.	10 – 18	13	2 to 3 plantings
Carrots	9 – 11	dig as needed	2 to 4 week intervals*
Cauliflower	8 – 12	(A)	2 to 4 week intervals
Celery	15 – 19	(A)	–
Chard, Swiss	7 – 9	44	once per month
Chives	12	perennial	–
Collards	9 – 12	24	once per month
Corn, sweet	9 – 13	(B)	Start new crop when last planting is 6" tall *(see example on page 12)*
Cucumber	7 – 10	26	2 to 3 plantings
Eggplant	12 – 14	13	single planting
Garlic	13 – 26	(C)	–
Kale	8 – 11	17	once per month
Kohlrabi	7 – 10	(A)	once per month
Leeks	16 – 18	(A)	

A

Each plant is harvested once. Plants in the same planting may not be ready at the same time, however, so that you can pick continuously from the same planting as plants mature to desired size. Also, note that harvest time lengthens in winter and shortens in spring.

B

The number of ears on a corn plant varies by variety. You may harvest for one to three weeks from a planting, getting one, two or three ears per plant.

C

Alliums can be harvested green in the spring. Both green and dry harvest extends over several weeks or longer.

D

Lettuce and spinach may give several successive harvests from the same planting if only the leaves and not the crown (growth point or center) are harvested. Here, too, time to maturity and length of harvest are longer in the winter.

HARVEST INFORMATION *(CONTINUED)*

VEGETABLE	APPROX. WEEKS TO MATURITY	APPROX. LENGTH OF HARVEST (UP TO) IN WEEKS	SUGGESTED PLANTING CYCLE FOR CONTINUOUS HARVEST
Lettuce, Leaf	6 – 13	(D)	10 day to 2 week intervals
Mustard	5 – 8	8	once per month
Okra	7 – 8	13	2 to 3 plantings
Onion	12 – 17	(C)	–
Parsley	10 – 13	40	2 to 3 plantings
Parsnip	15	dig as needed	2 to 4 week intervals
Peas, bush or vine	8 – 12	12	2 week intervals
Peppers	10 – 12	17	single planting
Potatoes, Irish	13 – 17	dig as needed	1 to 2 plantings
Pumpkins	14 – 17	17+	–
Radishes	3 – 9	(A)	2 week intervals
Rutabagas	13 – 14	dig as needed	2 to 4 week intervals
Salsify	17 – 22	dig as needed	2 to 4 week intervals
Shallots	17 – 26	(C)	–
Spinach	6 – 7	(D)	once per month
Squash, summer	7 – 10	17 – 26	2 to 4 plantings
Squash, winter	11 – 17	17+	2 to 3 plantings
Tomatoes, all	8 – 11	17+	1 to 2 plantings
Turnips	5 – 9	(A)	2 to 4 week intervals
Watermelon	10 – 14	13	2 to 3 plantings

A

Each plant is harvested once. Plants in the same planting may not be ready at the same time, however, so that you can pick continuously from the same planting as plants mature to desired size. Also, note that harvest time lengthens in winter and shortens in spring.

B

The number of ears on a corn plant varies by variety. You may harvest for one to three weeks from a planting, getting one, two or three ears per plant.

C

Alliums can be harvested green in the spring. Both green and dry harvest extends over several weeks or longer.

D

Lettuce and spinach may give several successive harvests from the same planting if only the leaves and not the crown (growth point or center) are harvested. Here, too, time to maturity and length of harvest are longer in the winter.

ADAPTED FROM:

Vegetable Planting and Harvest Guide for the Foothhills of Nevada and Placer Counties. *Planting Distances and Harvest Dates*. UC Cooperative Extension, Placer and Nevada Counties, Nancy Henson, Master Gardener. March 1985.

Includes information from Kimi Walsh of Garden Moon Farm, Davis Waldorf School.

Techniques for continual harvest work best when you use several of them together.

Consistent Supply — An Example

Sweet corn is a good example to demonstrate how to use several techniques together to achieve a consistent supply. This example combines *choosing varieties with different dates to maturity* with *succession planting*:

1. Select varieties with different times to maturity. This example uses five varieties which mature in 67 to 84 days from planting.
2. Decide how often you want a new planting to be ready. Here, a new crop of sweet corn will be ready every few days.
3. Make a first planting with several different varieties with different maturity dates.
4. Plan the next planting so that the earliest-maturing variety of the second planting is ready soon after the latest-maturing variety of the first planting. Here, it should be ready a few days later. Since the second planting occurs eight days after the first one, choose the 81-day variety, "Sweet Elite," to have the next crop five days after the previous one.
5. Follow the same procedure for the third and subsequent plantings.

Examples of Sweet Corn Plantings

Planting	Variety	(Days to Maturity)	Days To Harvest (from first planting)	Days Between Plantings
First	Quickie	(67)	67	
	Comanche	(72)	72	
	Duet	(74)	74	
	Sweet Elite	(81)	81	
	Capitan	(84)	84	
				8
Second	Sweet Elite	(81)	89	
	Capitan	(84)	92	
				12
Third	Duet	(74)	94	
	Sweet Elite	(81)	101	
	Capitan	(84)	104	

Adapted from ***Knott's Handbook for Vegetable Growers***

In the end, your own information from your own farm is best for your purposes. Keeping detailed, accurate records on an ongoing basis does take time from present activities, but is invaluable for planning future ones. Record what and when you plant, including varieties, where you got the seed, how well it germinated, how it grew, what its problems were, what your yields were, when you harvested, and anything else important. Then use that information to create plans for next year.

POST HARVEST HANDLING

You will find information on POST HARVEST HANDLING and SMALL-SCALE COLD ROOMS FOR PERISHABLE COMMODITIES in the appendix.

Poor postharvest handling practices can cause extensive loss of market quality. Fresh produce is alive, and after harvest it depends upon its own food reserves for the energy needed to remain alive. Farmers need to manipulate postharvest conditions so that product deterioration is minimized and the quality delivered to the consumer is maximized. They can do this by providing favorable:

- Harvest practices
- Packaging
- Postharvest environment

Harvest practices are the first link in maintaining quality. The best fruits and vegetables are those which mature in the field, so harvest at optimum maturity. Do so during the coolest part of the day, in the morning after the plants have dried but before the crops absorb much field heat. In addition, once they are harvested, keep them out of the sun and in the shade. Finally, handling produce gently and as little as possible minimizes abrasions and bruising which speed produce decay.

Packing shares for CSA is different than packing for other market outlets because boxes are filled with a variety of items. No standard box size or packing technique exists. However, packing sensibly is still important.

- ✓ **Place items on the bottom and the fragile ones on top.** If delivering **packaged** shares, top them with a colorful item such as a bunch of herbs, red lettuce or even flowers. Set up **bulk** pick-up sites so that items on the table go from heavy to light. As members move down the table they will automatically pack their shares properly.

- ✓ **Avoid overpacking and underpacking** your containers if possible. Improperly filled containers cause increased damage to produce.
- ✓ **Use containers that are not damaged.** Damaged containers can collapse or break open, which can harm produce.

The postharvest environment is very important for produce shelf-life. Poor handling at the farm may not affect the shares' appearance before members receive them, but can result in rapid produce decay afterward. Don't let produce heat up in the field before harvesting or in the sun after harvesting. Cool quickly to the proper temperature, around 32° for most root and leafy vegetables, 50° for potatoes, tomatoes, eggplants, peppers, and similar crops, and 70° for onions and garlic. Maintaining humid environments is important for nearly all crops, to avoid wilting and shriveling. Some vegetables are fine to store damp, while others are better kept dry. Wet floors, pans of water and humidifiers, swamp coolers and vaporizers in the storage room increase the humidity.

Another aspect of the postharvest environment is ethylene, a gas which ripens fruit and damages many vegetable crops. Ripe fruits, including tomatoes and melons, produce ethylene, and should be segregated from produce sensitive to ethylene damage if crops are to be stored for more than a day or two. If shares are harvested the same day or the day before members receive them, then ethylene is less important than temperature and humidity.

More information about postharvest handling is available in the appendix and from resources listed at the end of this handbook.

Worksheet
Crop Production for CSA

This worksheet helps you begin planning your crop production. See the end of this chapter for worksheets related to crop planning.

1. Which specific crops will you provide your members?

2. How many shares will you provide?

3. Which crops have a continual harvest?

4. Which crops can you plant several times in the season *(succession planting)*?

Worksheet

Crop Production for CSA

(continued)

5. What are the warm areas on your farm? the cold ones?

6. Will you use plant and soil covers, such as mulches, row covers, cold frames and greenhouses? Which ones?

7. What are your storage capabilities?

Community Supported Agriculture

...*Making the Connection*

Animal Products

This section offers some information for:

Eggs

Milk

Meat

Some CSA projects offer shares of animal products, such as eggs, milk and even meat. These foods are more regulated than fruits and vegetables. They therefore take a little more care to arrange, and some knowledge of the applicable regulations.

As described before, you should consider offering shares of animal products separate from produce shares. Your members' diets will probably be very different, and they will appreciate the flexibility of choosing to have eggs, milk or meat in addition to their produce. Of course, your member lists will overlap.

Eggs

Eggs, an animal product often offered through CSA, are not highly regulated and are easy to produce in an integrated farming system.

Regulations regarding the appearance, quality and size of chicken eggs are fairly specific for producers and distributors of eggs for retail sale. The California Department of Food and Agriculture (CDFA) does not recognize a distinction between retail sale through a CSA and retail sale through another channel. For that reason, CDFA would expect CSA projects to follow all regulations about sizing, grading and packaging chicken eggs. For more information, call CDFA, Egg and Poultry Quality Control at **(916) 654-0800.**

Similar regulations do not exist for eggs of other fowl. The eggs need only to be clean, and the packing should identify the "responsible party" *(the CSA farmer)* and the species of fowl.

Animals are a useful addition to farming operations interested in sustainability and resource stewardship. Not only do they eat food scraps, cutting down on waste, but they also consume and digest things humans either can't or don't. In addition, they can help the farm with pest control. Fowl are used for insect, slug, snail and weed control. Finally, since fowl are an easy method of introducing animals into a farming operation, they are ideal for CSAs who want to educate consumers about agricultural systems and the role of animals.

Community Supported Agriculture

By providing eggs through CSA, farmers with integrated operations can make an income from animals that scavenge nutrients, improve the farm and educate CSA members.

MILK

Before trying to sell milk through a CSA, interested producers should plan carefully.

Some of the first CSA-style projects in Japan and Switzerland centered on providing a clean supply of milk to consumers. Concerns about the milk supply in this country are increasing, especially over antibiotics and Bovine Growth Hormone (BGH). Since the Federal government is not requiring labeling of milk and milk products with information about these substances, an opportunity exists for small-scale producers to target people who want to know more about how their milk is produced.

In addition, milk from animals other than cows is less available and more expensive. Farmers may find that sufficient market demand exists for a small herd producing milk for direct sale to be profitable. Animals require more investment than annual crops, and so require more initial research to make the operation successful.

Before trying to sell milk through a CSA, interested producers should plan carefully. First, they need to assess demand, to find out if there are enough people willing to commit to the project. Second, they need to make an honest accounting of their facilities, start-up costs and operating costs. Third, they should decide how much they need to earn to cover costs, including returns to their own labor, and decide if demand is high enough to meet their required earnings.

Milk from cows, goats and sheep for sale in California is regulated by the CDFA, Milk and Dairy Foods Control Branch at **(916) 654-0773**. Other animals' milk will soon be regulated. These regulations govern milking facilities, personnel, handling, packaging, licensing and more. If you are starting a dairy operation, contact CDFA for information.

If you are planning to build dairy facilities, such as a milking barn, and will offer the milk for sale, you will need to follow certain building codes. The floor-plan, construction materials and more are all regulated.

In addition, *"every person, before engaging in the business of producing market milk [milk for sale], shall obtain a permit."* Producers' dairy farms and herds are then subject to inspection. Permits are good for a year.

Therefore, producing milk for a CSA is no different than producing milk for other market outlets, even though the way you sell and distribute it is. For exact information relevant to your farm, herd and facilities, contact CDFA.

LIVESTOCK

Most CSAs have focused on producing a wide variety of crops for their customers. Little attention has been paid to increasing diversification through livestock. This section will increase your awareness of the opportunities through incorporating livestock into your farming operation, using grass as your primary feed source for finishing livestock, and an overview of California livestock slaughter requirements. Direct marketing of livestock products is an underutilized market opportunity.

WHY USE LIVESTOCK?

Livestock can be useful to your operation in a variety of ways. The benefits of incorporating livestock include:

- **Livestock allow you to utilize areas on your farm not suitable for cropping** – Areas too steep, inaccessible, laying fallow, or lower in fertility can be utilized by livestock.
- **Livestock return nutrients to the soil** – For example, a 1,000 pound steer can return 14 pounds of nitrogen, 9 pounds of phosphorous, and almost 11 pounds of potassium to the soil.
- **Livestock can harvest a crop humans cannot digest and that can be grown for free** – The crop in question is grass. Grass grows by capturing sunlight energy through its leaves. This growth can be harvested, digested, and converted to a product that humans can digest by livestock.
- **Livestock can be a useful tool of restoration on your property** – Grazing on cropping areas adds manure to the soil, trampling of old standing forage or crops returns organic matter to the soil, and concentrating action of animal hooves assists in breaking hard, capped soils.

Community Supported Agriculture

Using Grass as Your Primary Feed Source for Finishing Animals

If you are looking to expand into offering livestock products in your CSA, you need to maximize the use of grass. Grass is your cheapest feed source. It will also produce lean beef. There is nothing wrong with using grain in your feeding program — the only problem is the cost. Your mantra should be ***"Maximize grass, Minimize grain"***. One company based in Kentucky, *Laura's Lean Beef*, was able to receive certification on their steaks and roasts as meeting American Heart Association dietary guidelines. These guidelines include: fat, saturated fat, cholesterol, and sodium. Remember, livestock products are healthy to eat and can be environmentally friendly.

In order to maximize use of grass, you must strive to match forage supply with animal demand. Grass grows by capturing sunlight energy. You should think of grass leaves as solar panels. As long as you have enough solar panels *(leaves)*, the plant is able to capture energy. If you remove all of the panels, the plant has to sacrifice nutrients from the root to generate enough top growth to capture sunlight energy. This makes plant recovery slower and causes part of the roots to die off. The key is to remove animals from an area while there still enough panels out there. You then must wait until the plant has completely recovered from defoliation before allowing the animals to regraze.

Grass grows at different rates during a year. In California, grass growth is extremely slow in winter, rapid in spring, and non-existent in summer and fall on annual dryland range pastures. On irrigated pastures, growth slows down in summer, and increases during fall. Your basic strategy should be to accumulate feed in periods of rapid growth which can be allocated out during periods of slow growth.

In California, you will probably find it necessary to have access to irrigated pasture in order to get livestock up to a slaughter weight and condition. This can be accomplished by: irrigating your own property, leasing irrigated pasture, or contracting or partnering with someone else to raise the livestock.

No matter how you end you end up producing your livestock product, it needs to be something you believe in. This means you should raise a few head and eat it yourself.

Keep making adjustments in your feeding program until you like what you eat. Proper aging can make a big difference in the tenderness and flavor of meat. Once you like it — you can start to market the product to others.

Joel Salatin, a Virginia rancher and farmer, is an example of innovation in marketing livestock products. He direct markets everything off the farm including: pastured poultry, grass fattened beef, rabbits, lamb, turkey, eggs,and vegetables. Joel has a waiting list of customers — in fact, it can be difficult to meet demand. He was able to get people to buy his beef by first giving away samplers of two T-bone steaks. This was done so people could see that grass fattened beef can be tasty and tender. Once they tasted it, they became believers. Slide presentations about the farm were given to civic, youth, and other groups with cooked samples on hand. Barbecues were also put on for potential customers. All of these efforts paid off and created demand.

Joel has three basic philosophies about sales that were stated in the June, 1994 **Stockman Grass Farmer** newspaper, *"Set your prices so that no matter what your volume, your return is both emotionally and financially rewarding; steer clear of the temptation to do everything the customer wants, and; and let cash be your business byword."*

Legal Stuff

In California, the only way you can sell meat to sell to others is to have it slaughtered at a USDA inspected slaughterhouse. Animals raised or purchased by the owner may also be slaughtered by the owner, mobile slaughterer, or state licensed custom livestock slaughterhouse. **HOWEVER**, this meat is not legal to sell to others. The only exceptions to this is meat going to the owner, members of his/her household, employees, and/or non-paying guests. If you are in doubt about this or have any questions, contact the Meat and Poultry Inspection Branch at the phone number given in the other sources of information section.

Final Thoughts

The purpose of this section on livestock was to stimulate your thinking about potential opportunities in your agricultural operation. Before jumping in, you need to do research, attend pertinent educational trainings, and do some on-farm experimentation to finally be able to produce a product consistent with consumer desires. Make full use of the other resources section to get you headed further down the road. The key word is ACTION!

Other Livestock Resources

Grazing Educational Programs

California Grazing Academy
11477 E Ave
Auburn, CA 95603
Attn: Roger Ingram
(916) 889-7385 Phone
(916) 889-7397 FAX

Livestock Slaughter Requirements

California Department of Food and Agriculture
Meat and Poultry Inspection Branch
1220 N Street
Sacramento, CA 95814
(916) 654-0504 Phone
(916) 654-2608 FAX

General Livestock Information

Contact the local Cooperative Extension office in your area.

General Grazing and Grassfed Beef Information

Stockman Grass Farmer Newspaper
P. O. Box 9607
Jackson, MS 39286-9607
(800) 748-9808 Phone
(601) 981-8558 FAX

Yield Estimation Chart

This chart will aid in estimating yields required for a CSA. In **column 1**, write the crop. In **column 2**, write the variety or cultivar.

In **column 3**, write the amount of each item provided per share. This information can come from personal experience or the chapter *Production for CSA*. If there are large and small shares, figure each type separately, then add the total yield needed at the end.

In **column 4**, write the number of shares you will provide. Note that if you are providing more than one type of share, this number may vary for the different crops.

Column 5 equals column 3 multiplied by column 4, and indicates the total amount of each crop and variety you need to harvest for the season.

Year:

1 Crop	2 Variety/Cultivar	3 Estimated Amount/Share	4 Number of Shares	5 Total Estimated Amount Required

Yield Estimation Chart *(continued)*

1 Crop	2 Variety/Cultivar	3 Estimated Amount/Share	4 Number of Shares	5 Total Estimated Amount Required

Planting Estimation Chart

This chart will help indicate how much to plant of each crop. **Column 1** is for the crop, **column 2** is for the variety or cultivar.

In **column 3**, write the estimated total amount required from the Yield Estimation Chart.

In **column 4**, write estimated yields per 100' row, which can be from your own experience or from the chapter ***Production for CSA.***

The total in **column 5** is obtained by dividing column 3 by column 4, and is the estimated number of rows to plant of each crop for your CSA.

Year:

1 Crop	2 Variety/Cultivar	3 Est. Total Amt. Required	4 Est. Yield per 100' Row	5 Est. # of 100' Rows to Plant

Planting Estimation Chart *(continued)*

1 Crop	2 Variety/Cultivar	3 Est. Total Amt. Required	4 Est. Yield per 100' Row	5 Est. # of 100' Rows to Plant

Crop Description Chart

Information on crops and varieties (cultivars) is readily available in seed catalogues. Having "days to maturity" for different varieties all in one place will help in planning for plantings and harvest, and also in selecting appropriate varieties for different times of year and for short- or long-season plantings.

Column 1 is for crops and varieties (cultivars). In **column 2**, write the days to maturity from the seed catalogue or packet.

In **column 3**, write when you intend to plant or transplant. From that starting date and the days to maturity, figure out when you should be able to start harvesting the crop and record that time in **Column 4**.

In **column 5**, write the approximate length of harvest. This information can come from your own experience, information in seed catalogues and farming books, or the chapter *Production for CSA*.

Finally, **column 6** is for additional information, such as bolting tendencies, succession planting strategy, actual days to maturity or harvest if different than stated, uniformity of harvest, susceptibility to frost or freeze, etc.

If the crop is to be planted several times in succession, record each planting on a new line.

Year:

1 Crop and Variety (cultivar)	2 Days to Maturity	3 When to Plant or Transplant	4 When to Start Harvest	5 Length of Harvest	6 Additional Information

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Crop Description Chart *(continued)*

1 Crop and Variety (cultivar)	2 Days to Maturity	3 When to Plant or Transplant	4 When to Start Harvest	5 Length of Harvest	6 Additional Information

Community Supported Agriculture

Harvest Planning Chart

The CSA will not only need enough total production, but also enough weekly production to supply members with a continual supply of produce. A little planning is essential, and this chart helps begin the process.

Column 1 and **column 2** are for the crop and variety (cultivar). In **column 3**, write your estimated total amount required from the *Yield Estimation Form.*

The next 13 columns represent weeks *(four charts together make up a year).* At the top of each column, write the date of the first day of each week. For each crop, write what you need to do in the week you will do it: plant **(p)**, transplant **(tp)**, and harvest **(h)**. To find out what crops you will have available that week, read down the column looking for **h**'s. Of course, this is an estimated plan; the weather may decide something different.

For succession plantings, put each planting on a new line.

Year:

Crop	Variety	Dates: Est Total	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 **(916) 889-7385** • FAX (916) 889-7397

Community Supported Agriculture

Harvest Planning Chart *(continued)*

Crop	Variety	Dates: Est Total	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13

University of California COOPERATIVE EXTENSION/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Community Supported Agriculture

Yield Log

Keeping a tally of how much you produce and distribute to your members gives you valuable information. Knowing how much members received over the season helps you determine if the share price or size should be changed. A log also indicates slow and peak times. Finally, this information helps you determine total yields, making planning for next year easier.

Year:

Harvest Date:														
Crop/Variety	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Grand Total

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Yield Log *(continued)*

Harvest Date:														
Crop/Variety	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Tot Amt / Sh Amt	Grand Total

Yield Totals Chart

This chart can help you keep track of yields. List the crops you are growing in **column 1**, with varieties (cultivars) in **column 2**.

In **column 3**, write your estimated yields, and in **column 4**, write your actual yields per 100' row.

Having these figures side-by-side allows you to see which crops did well, and which did poorly. It also helps with planning for next year.

Year:

1 Crop	2 Variety/Cultivar	3 Estimated Yield	4 Actual Yield

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Yield Totals Chart *(continued)*

1 Crop	2 Variety/Cultivar	3 Estimated Yield	4 Actual Yield

Managing the Shares

"If a customer refuses to patronize your product unless he (sic) can get it 'in the store' or on his front porch, he's not a customer who appreciates you anyway. Some folks wouldn't be satisfied unless you cooked it and spooned it into their mouths."

—Joel Salatin

Shares — their distribution, price and payments — make CSA very different from other marketing methods. Shares are an on-going direct relationship between farmers and consumers.

This chapter looks at handling the farm products in the shares, and managing payments and the farm budget. It is broken down as follows:

Community Supported Agriculture

This section discusses share distribution, to help you decide how to get shares from the farm to members.

Share Distribution

When deciding how to handle distribution for your CSA, you should examine **who, when, where** and **how**.

Who Delivers the Shares?

Three people can deliver the shares: the farmer, the members, or someone else.

The Farmer

The farmer can deliver the shares to a central pick-up site in town, deliver them door-to-door, or both.

The Members

The members can come to the farm to get their shares. They can also set up a system in which a few members pick up the shares for everybody, so that not everyone needs to drive to the farm each week.

Someone Else

Live Power Community Farm sends shares several hours from Covelo to San Francisco by buying space on a refrigerated truck going to the city. They take the produce partway, meet the truck, and transfer the produce. This saves them having to drive all the way, and also saves them the expense of their own refrigerated truck.

Other farms employ people specifically to drive the shares from the farm to town.

When Do You Deliver?

You need to consider day and time; your membership will help you decide. On weekdays, evenings often work best for members with day jobs.

Here again, if you are connecting to an established group, they may help determine when you will deliver.

- At an office, delivering around 4:00 p.m. will let members pick up their produce on the way home.
- At a church, the delivery might coincide with a service or other function.
- At a school, you might deliver before school lets out.
- With a farmers' market, you can plan to deliver either to the market or to another site nearby.

Also keep traffic in mind. Trying to deliver to a city during rush hour can add hours to your delivery schedule.

Work with members to decide reasonable delivery times.

If people are coming to your farm to get their shares, the same ideas apply. ***Know your members and their schedules to plan for the best times.***

Most CSAs have a time window for picking up produce. Having a set ending time keeps produce from staying around for a long time, and lets the host of the site know what to expect. The Vegetable Club CSA members pick up produce at the farm from noon until 7:00 p.m. Sometimes, the farmers pack up the remaining vegetables right at 7:00 p.m., to make it clear that members need to stick to the established schedule.

Several farms suggest keeping the pick-up window short, to two to four hours. A short window means less hassle for the site host and less time for someone tending the site. It also creates a flurry of activity which lends excitement to the CSA and increases the likelihood that members will meet each other.

Where Do You Deliver the Shares?

If you are taking shares to town, you can arrange one pick-up site or several, depending on where your members live and the size of the town. A pick-up site is a place where members come to get their shares. You may want to set a minimum number of members per site, perhaps five or ten shares per site at least. If you have connected with a church or school for members, those are obvious pick-up sites. Other places include side yards, porches, and offices.

Generally, a good site has easy access for members. It should also be sheltered from the weather.

As with everything else, efficiency is important. Delivering a few shares to lots of sites can take a while. Making fewer stops may be a better use of your time. Also, plan your route so that you don't double back on yourself or wander all over.

There are two types of sites:

1. Tended
2. Untended

Tended Sites

Tended sites provide more contact with members; untended sites provide more flexibility.

Tended sites give you more direct contact with your members. You can explain what is available and why, give cooking tips, etc. However, this also increases your labor costs. Therefore, tended sites should have fairly short hours.

Tended sites are also good because you can collect money. For this, you need a pen, a list of members and a money box. Write down who pays and how much they pay on the list. Make sure you know what name the share is under.

One caution about tended sites: if you are selling something, such as extra shares or additional produce, be sure you don't run afoul of vending or zoning laws. You probably need a permit to sell. Many places, Placer County for instance, do not allow sidewalk vending. Check with the tax office in the city or county where you want to sell for more information. If you are simply handing out pre-sold items, then you should not have any problems.

Untended Sites

Untended sites require less labor. You can have more of them, and the window for pick-up can be longer. On the other hand, you get less direct contact with your members. There is also the danger that someone will walk off with something they haven't paid for.

Most CSAs have had very little trouble with untended sites. Even with bulk distribution, members by and large don't take more than their allotment. Untended sites should be away from the street, like in a side yard or on a

porch, or down a quiet road to reduce the chance that someone will happen upon the shares and take something.

All sites should have:

- ✓ **A list of who gets a share.** This is for the site tender and the members to know who has paid, but is also handy for avoiding confusion. For example, a husband and wife might forget to coordinate who picks up the share, so they might both stop by on their way home from work. Having a check-off list solves this problem.
- ✓ **A list of when people owe for their shares.** This is especially good for subscription plans, because people may forget when they need to pay next.
- ✓ **Information about what is in the box.**
- ✓ **Information about what will soon be available.**
- ✓ **Notepad and pen to get comments from members.** These are particularly useful at untended sites because members cannot voice their opinions to a person.

Keep distribution sites clean!!

Finally, keep your distribution site, whether on-farm or off, neat and tidy. It doesn't have to be hospital-sterile, but it should be clean and pest-free.

How Do You Deliver?

CSAs deliver two ways:

1. They either deliver the shares already divided up and packaged
2. They deliver the harvest in bulk and let members do the dividing

Packaged

Packaged shares work for both shareholding and subscription CSAs. The farmer is responsible for dividing up the harvest into the shares, bagging the produce as required and putting shares in containers. Share containers should be

reusable to cut down on costs and reduce waste. They also need to be waterproof to hold wet produce. If the containers are especially durable or expensive, ask members to put a deposit on them. Some examples of containers are:

- Bags *(paper or cloth)*
- Boxes
- Old plastic recycling bins
- Baskets *(bushel baskets, especially)*

You might want to have members each put deposits on two containers. Rotate the containers so that each week members have one container and the farm has the other.

One important benefit of CSA is resource conservation— reduce, reuse and recycle your packaging.

Presentation is fairly important. Several CSAs suggest having the same kind of container for everyone, for uniformity. Also, your products should be clean. Although members expect products bought through the CSA to be less processed, clean products are more convenient and present a better image of the farm. Cleanliness is especially important for animal products.

Another aspect of presentation is how you put items in the container. Heavy items should go on the bottom so they don't crush the more fragile ones. Putting some flowers, a bunch of herbs, or the most colorful vegetables on top makes the share more attractive.

Bulk

Bulk distribution, in which members divide the harvest themselves, works especially well for shareholding CSAs, especially if members pick up vegetables at the farm. At the distribution site, set up large boxes and baskets with the harvest. For the members, you need:

- ✓ Plastic and paper and/or cloth bags for holding produce *(encourage members to bring their own)*
- ✓ Scales for weighing the produce
- ✓ Signs to tell members how much of what they get *(a chalkboard or white-board is good for this)*

Suggestions for bulk sites:

- **Set up the items in the share from heaviest to lightest.** As members move down the table they automatically put the produce in their containers in the right order.
- **Pick slightly more than you'll need, or under-estimate the share amount.** For example, for 50 one-pound shares of spinach, consider having up to 55 pounds out. As each person goes through and weighs a little on the high side, that extra bit gets used up.
- **Have a sharing table.** If members don't want something in their share, they can put it on the sharing table for other people to have. This reduces waste of unwanted produce.
- **Consider trying a "take what you need" approach.** Some CSAs have had success with this, reporting that people generally make sure there is enough for everyone.

The following should help you see the different choices for distribution:

Bulk Tended	**Bulk Untended**
Needed: *list of items in share* *name check-off list* *money box for payments (optional)* ✦ You have greater communication, getting members' feedback and giving information on share items ✦ Person tending can replenish and tidy bulk items	**Needed:** *list of items in share* *name check-off list* *suggestion notebook with pen* ✦ Best to have this site on-farm ✦ Of these choices, involves the least labor
Packaged Tended	**Packaged Untended**
Needed: *check-off list* *money box for payments (optional)* ✦ You may be able to sell extra ✦ You have greater communication, getting members' feedback and giving information on share items	**Needed:** *check-off list* *suggestion notebook with pen* ✦ This site can be nearly anywhere

Worksheet
Share Distribution

This worksheet will help you plan share distribution. Here are some questions to ask when designing your harvest and distribution system:

1. Who will deliver the shares?

2. When will you deliver?

3. When will you harvest?

4. Will your overall farm plan have you harvesting at least twice a week?

5. Where will members pick up their shares?

6. How many pick-up sites will there be?

Worksheet

Share Distribution (continued)

7. What time of day will pick-up be? For how many hours?

8. Will you deliver door-to-door?

9. Will you package the shares, or will the members?

10. What containers will you use for packaging?

11. Will your pick-up site(s) be tended or untended?

Setting the Share Price

This section includes:

Three ways to set your share price

Handling multiple income sources for CSAs

Contingencies

The biggest contributing factor to CSA burnout and failure is setting the share price to low. The share price should reflect the actual cost in supplies and labor required to provide shareholders with food, including a fair return for yourself.

There are a lot of opinions of what constitutes a *"fair"* share price. Some suggest a low price to attract new customers, especially to a new CSA or farm. They also say that member involvement in production or distribution, or the "inconveniences" of CSA warrant lower prices.

Others caution that low prices don't provide farmers enough income. They note that the customers who are searching for bargains may also prove more trouble than they are worth, and won't support the farm in tough times. Finally, an extra $50 or $100 per year may not be significant for many urban members, but when added up for all the members, it can make the difference for a small farm.

In setting your share cost, look at your situation. Who are your members — what can they afford? Does your CSA have a waiting list? That is a sign that people are willing to pay more for a share. Also, are members complaining about getting too much food or are lots of people splitting shares? Both indicate that the share size is too big. You may be able to shrink the share size and sell more shares.

Here are three suggested methods for setting the price of a share:

1. Selling at market prices
2. Approximating market value
3. Calculating your costs

The biggest contributing factor to CSA failure is low share prices.

❶ Selling at Market Prices

Selling at market prices is easy, and works best with a **subscription** CSA. With this method, you charge your members a set amount. Then you give them a share of produce which would cost them about that amount if they bought it elsewhere. If you use the prevailing farmers' market prices rather than store prices, members feel like they are getting a good deal.

This method requires you to have enough product to meet your commitment for each delivery. Rather than risk not having enough, you should plan to have too much. Therefore, you need to have other market channels like a farm stand or a farmers' market, to handle the overflow. Having several outlets allows you to produce plenty to fill your members' orders, and have a safety-valve for the extra.

Many farms use subscription CSAs to diversify their marketing, selling from 15 to 50 percent of their production to subscribers. For other farms, the CSA provides a core income, and the other sales supplement it.

A long waiting list may signal a share price that is too low.

Example: Share price = $12.00 per week.
A box in June might have:

2 heads lettuce	$ 1.50
2 bunches kale	2.00
1 bunch carrots	1.00
2 lbs new potatoes	2.00
2 bunches radishes	1.00
1 bunch green onions	.75
1 bunch beets	.80
1 lb snap peas	2.40
1 bunch rosemary	.60
Total	**$ 12.05 ≈ $12.00**

❷ Approximating Market Values

Approximating market values works the other way. You decide how much you feel a household *(of four or so)* should expect to spend on vegetables for the season. This may be as low as $300 to $400 for eight months of regular produce with no special certification, or as high as $800 to $1000 for a full year of specialty vegetables that are certified organic or bio-dynamic. Then decide what you need your income to be. Divide the *(gross)* income by the share price to come up with the number of shares. *Can you grow food for that many families for that amount of money?* If so, then go with it.

Example:

You decide that three to four people could expect to spend $600 for nine months of organically-grown produce. If you sold 40 shares, your gross income would be $24,000. With some quick figuring, it seems like that would provide rent on your land, money for that disc you need, and enough to farm and live on. You also figure that you can raise that much food on your four acres without needing more help or bigger equipment.

This approach requires that you know your farm well. You need to know what it can produce and what it requires to produce it. If you don't have a sense of all this, then you should consider using the next approach, OR look at farm budgeting information in another reference.

❸ Calculating Your Costs

Calculating your costs takes the most time, gives the best accounting for you and your members, and is better suited for a shareholding CSA. Decide how many shares you can reasonably provide from your land, and then figure out how much it will cost you to raise the food. Include in this accounting labor costs for yourself and others, for growing, harvesting, and distributing.

On this and the following page are sample budgets from other farms.

With this method, you should also keep track of expenses throughout the season. At the end, go back and add up your actual spending and income. Any shortfall should then be charged to the share-holders, and any leftover funds returned.

Kimberton (Pennsylvania) CSA Budget 1995

INCOME			
30 full shares @ $880	$ 26,400		
100 half-shares @ $550	55,000		
TOTAL INCOME:			**$ 81,400**
EXPENSES			
Garden Lease	$ 1,130		
Certification	250		
Office & Miscellaneous	1,940		
Sub Total:		**3,320**	
Seeds & Plants	2,000		
Compost, Mulch, etc.	1,500		
Supplies	2,800		
Fuel	1,180		
Utilities	350		
Maintenance & Tools	3,000		
Truck Expenses	1,500		
Sub Total:		**12,330**	
Potatoes	2,000		
Sub Total:		**2,000**	
Sullivans:			
Kerry's Salary	30,000		
Barbara's Salary	10,000		
FICA (½)	3,500		
Health Insurance	2,100		
Housing	3,000		
Sub Total:		**48,600**	
Volunteers:			
Housing	3,000		
Stipends	9,150		
Sub Total:		**12,150**	
Capital Expenses	3,000		
Sub Total:		**3,000**	
TOTAL EXPENSES:			**$ 81,400**

Community Supported Agriculture

...Making the Connection

INTERVALE COMMUNITY FARM 1992

Intervale Community Farm in Vermont calculated their expenses this way:

COST CALCULATION WORKSHEET Pg 1 (Intervale Community Farm)	ESTIMATED AMOUNT	ACTUAL AMOUNT
CAPITAL EXPENSES		
Tractor Equipment	(free)	
1)		
2)		
Hand Tools/Equipment		
1) *Tomato Cages*	1,000	
2) *Various*	200	
Irrigation Equipment		
1) *Drip Hose, etc.*	500	
2)		
Farm Improvement		
Capital Fnd *(reserve for future pur)*	1000	
Greenhouse *(Sun Tunnel from GSC)*	500	
1991 Carryover *(inc. 89-90 def)*	2000	
Root Cellar *(start up costs)*	500	
Other		
TOTAL Capital Expenses:	**5,700**	
LABOR EXPENSES		
Farmer (__ hrs x $_.__ per hr)		
or SALARY *(entire year salary)*	15,000	
Farm Laborers		
1) ___ hours x $_.__ per hr		
2) ___ hours x $_.__ per hr		
3) *Interns(2), 18 wks, $160/wk*	5,760	
4) *Intern, 13 wks, $80/wk*	1,040	
Distribution *(Truck, 18 days @ $20)*	360	
Administration		
Medical Ins. *(full year, farmer)*	1,040	
FICA *(farmer, interns)*	1,630	
Workers Comp *(farmer, interns)*	1,520	
Other		
Intervale Fndtn (50 hrs of work)	1,000	
TOTAL Labor Expenses:	**27,350**	

COST CALCULATION WORKSHEET Pg 2 (Intervale Community Farm)	ESTIMATED AMOUNT	ACTUAL AMOUNT
OPERATING EXPENSES		
Seeds, Plants, etc.	500	
Land/Bldgs Rent *(5 acres @ $25)*	125	
Water		
Electricity	200	
Gas/Diesel	300	
Natural Gas/Propane	200	
Compost/Manure/Fertilizer	950	
Greenhouse Maint.		
Row Covers		
Equip. Rep. *(ICF does tractor mnt.)*	300	
Equip. Rental *(Kubota, BCS, etc.)*	1,800	
Bldg. Rep. *(paint, lumber, etc.)*	225	
Telephone	880	
Printing/Office Supplies		
1) Ads/Recruitment Leaflets	700	
2) Newsletter *(post/print/env)*	500	
Other		
Organic Certification	35	
Sprays	200	
Contingency (3.5% of budget)	1,400	
Checking Account	100	
CSA Conf at B-D Assoc.	100	
TOTAL Operating Expenses:	**8,515**	
Total Capital Expenses	**5,700**	
Total Labor Expenses	**27,350**	
Total Operating Expenses	**8,515**	
GRAND TOTAL EXPENSES:		**41,565**

You will find a blank worksheet like this one at the end of the chapter.

Adapted from Jered Lawson, ***Community Supported Agriculture Reader.***

With this estimate of total expenses and an estimate of your production, you can determine your share price or prices. If you have one type of share and one source of income for your CSA, calculating the share price is easy:

Share Price = Total Expenses ÷ Number of Shares

Having different types of shares or other incomes makes the calculation more complex.

Start with your Total Expenses, which is your required income. Subtract other CSA incomes, such as T-Shirt sales, fees from schools or groups who tour your farm, donations and grants. Next subtract per share fixed fees. These might be delivery surcharges or deposits on share containers. Then use the remaining required income to decide on share prices.

Example:

You have $20,000 in unmet expenses. You have two types of shares, and a Gourmet share is half again as expensive as a Basic share. If you can provide 20 Gourmet shares and 45 Basic shares, then:

20 Gourmet shares @ $400	=	8,000
45 Basic shares @ $270	=	12,150
Total	=	**20,150**

Intervale Community Farm decided to meet their expenses as follows:

INCOME (INTERVALE COMMUNITY FARM)		
TYPE OF INCOME	**ESTIMATED AMOUNT**	**ACTUAL AMOUNT**
Miscellaneous Income *(T-Shirt sales, tours, etc.)*	500	
Delivery Charges *(21 shares at $56 each)*	1,176	
Summer Shares *(129 shares at $280)*	36,120	
Winter Shares *(50 shares at $75)*	3,750	
TOTAL INCOME:	**41,546**	
TOTAL EXPENSES:	**41,565**	

You will find a worksheet for calculating your share price at the end of the chapter.

CSAs often donate to community food lockers.

These methods determine your ***average*** share price for each type of share. Many CSA programs have discounted shares or a sliding scale of share prices. A sliding scale lets people pay different amounts for their shares (which are nevertheless the same size) depending on their income levels. If you have a sliding scale, you can charge members based on what you know of them. Or you can ask them to set their payments voluntarily, giving them upper and lower limits. With discounted shares, most members pay a little extra to cover a discount which you offer to a few.

Many CSAs also donate to food lockers or shelters. Some include these agencies by giving them regular shares for free. Other CSAs donate surplus harvests and shares which members haven't picked up that week. Note, too, that the cost of producing donated products may be tax deductible.

Contingency 1: Crop Loss

Generally, CSA projects ask consumers to recognize that they are supporting the farm, through good seasons and bad. Ordinarily, farmers bear the risk of crop loss; CSA asks consumers to shoulder some of that risk. Therefore, most do not make provisions for refunds. In the event of a total crop failure, some do promise to refund money that has not already been spent on production costs.

CSA farms have found that some members do get very angry when crops fail, especially if they don't get a refund of their money. The members that stay with the project, however, learn a lot about the problems that farmers face and recognize their role in preserving small, ecologically-sound agriculture.

Contingency 2: Cost Overruns

If costs exceed the proposed budget, then shareholding CSAs ask members to make up the difference. Some CSAs create a contingency fund of 10% of the budget, just in case expenses are more than expected. Others include on the commitment form a pledge to pay up to 10% or 12% more than the original share price.

If expenses are more than 10% or 12% higher than expected, it should become apparent early in the season. This situation generally calls for a renegotiation of the membership agreement, so that either farmers scale back production or members increase their financial commitment.

Community Supported Agriculture

This section discusses:

Different types of payment plans

Ways to keep records

Non-cash payments

How you set up your payment plan depends on:

Whether you have a subscription or shareholding CSA.

Your members' income levels.

Your ability/desire to keep records.

Share Payments

You should keep two lists of your members. One has their names, addresses and telephone numbers. On this list, you may also want to include information you find useful, such as: number of people in the household, birthdays, favorite vegetables, etc. The other list should include only payment information, and should be easy to read and simple to maintain.

It is important to maintain records of members' payments, and to make sure you are paid in full. There will be confusion, people who forget their payments, and maybe even some who try to get out of paying altogether. Careful records and a little persistence will solve nearly all your problems.

If you have a computer, these records are easy to maintain in a *spreadsheet* program. There are several available on the market.

Annual Payments

One annual payment in advance requires the least ongoing book-keeping and assures you of your income. It commits members to the project, and marks the payment as an investment in a farm and its production rather than a simple cash-for-goods exchange. However, it also commits you to the CSA project. In addition, you need members who have enough money that they can pay hundreds of dollars in advance for food they will receive much later.

Usually, members get a small discount for paying in one lump sum.

Two or Three Payments

Having ***two or three payments*** means keeping records of who has paid what, especially if they are committing to a season's worth of vegetables but paying in installments. Members are almost as invested in the project as with the single payment, but the smaller payments make CSA more available. Multiple payments also space your income out over the season. Payment dates for three installments might be: February 1st, May 1st, and August 1st.

An arrangement that works particularly well is to have some of your members pay everything in advance while others pay in installments. This assures you of start-up money and provides an ongoing income.

In this table showing payments for a year-round CSA, note that Allen and Kim pay quarterly, Garcia bi-annually, and Thompson annually.

SUBSCRIPTION/SHAREHOLDER PAYMENTS (SAMPLE 1) 19____

NAME	AMOUNT PAID (1/1)	AMOUNT PAID (4/1)	AMOUNT PAID (7/1)	AMOUNT PAID (10/1)	TOTAL PAID
Allen, J.	140.00	140.00	140.00	140.00	560.00
Garcia, H.	280.00		280.00	SAMPLE	560.00
Kim, N.	140.00	140.00	140.00	140.00	560.00
Thompson, B.	560.00				560.00
TOTALS:	**1,120.00**	**280.00**	**560.00**	**280.00**	**2,240.00**

This shareholding CSA has various payment plans. Members paid in one, three, and monthly installments following regular plans.

QUARTERLY OR MONTHLY PAYMENTS

Quarterly or monthly payments are used by both subscription and shareholding CSAs. For shareholders, these plans allow those with limited or fixed incomes to participate. For subscribers, short-term payments allow them to start and stop when they want. This flexibility helps overcome their hesitancy to buy their food in advance.

SHAREHOLDER PAYMENTS (SAMPLE 2) 19____

NAME	AMT PAID	DATE	AMT PAID	DATE	AMT PAID	DATE	AMT PAID	DATE	AMT PAID	DATE	AMT PAID	DATE	AMT PAID	DATE	TOTAL PAID
Allen, J.	200.00	2/13					200.00	5/3					200.00	8/1			600.00
Garcia, H.	600.00	2/15							SAMPLE								600.00
Kim, N.	200.00	2/17					200.00	5/1					200.00	8/2			600.00
Thompson,B.	80.00	2/15	80.00	3/1	80.00	4/2	80.00	5/1	80.00	6/1	80.00	7/4	80.00	8/1	40.00	9/1	600.00
TOTALS:	1080.00		80.00		80.00		480.00		80.00		80.00		480.00		40.00		2400.00

You will find blank Payment Schedules 1 and 2 at the end of the chapter.

Some farms have found the monthly payment plan to be too much bookkeeping, and have also found participation too variable to be worthwhile. Quarterly payments are better if you don't have other outlets to compensate should you have a sudden drop in membership. Monthly payments are more accessible for those with limited incomes.

Four-Week vs. Monthly Payments

If you require subscribers to pay four weeks at a time, they will always know how much to pay, but won't remember when. You need to remind them that their payment is due, with a postcard, a telephone call, or a note at the pick-up site or with their share. If you have subscribers pay monthly, they will know when the money is due, but may not remember to pay extra in months with five weekly shares. Again, you will need to remind them. In addition, it is easier to get people started with four-week payments, because you don't need to wait for the first of the month to come around.

Dear Full Belly Farm Veggie Eater,

Thank you for including us on your menu!!! According to our records you will receive your last produce delivery on _____. If you'd like to continue receiving a produce box, simply return this card, or call us at 796-2214 and mail us your payment for $11.00/weekly box. In order to ease our recordkeeping, we ask that you pay for at least 4 weeks at a time. To assure uninterrupted delivery, we must receive confirmation at least 3 days prior to your next (unpaid) delivery date.

Thanks for your support and Happy Eating!

—The Folks at Full Belly Farm—

SAMPLE

Name: _____

Pickup site: _____

Enclosed is:
_____ $44 for one month (4 wks.)
_____ $126 for 3 months (save $.50/box)
_____ other (e.g. alternate weeks)

Used by permission of Full Belly Farm

The next page shows one way of recording payments and recording share deliveries for a subscription CSA which allows members to pay four weeks at a time.

Community Supported Agriculture

...Making the Connection

These tables show payments for a subscription CSA. Shares cost $12 per week, and payment is made four weeks at a time.

SUBSCRIPTION PAYMENTS RECORD (SAMPLE 3A) 19____

PAID BY: (DELIVERY DATE)	2/3	2/10	2/17	2/24	3/3	3/10	3/17	3/24	3/31	4/7	4/14	4/21	
NAME	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	AMT PAID / DATE	TOTAL PAID
Allen, J.				48.00 2/20			48.00 3/15					48.00 4/19	144.00
Garcia, H.	48.00 2/1												48.00
Kim, N.	96.00 2/2					SAMPLE			48.00 3/28				144.00
Thompson, B.	48.00 2/1								48.00 3/27				96.00
TOTALS	192.00			48.00			48.00		96.00			48.00	432.00

There are two payment records: 3A shows the dollar amounts: 3B shows when members get shares. Note that members start in and drop out easily. To stay on top of this, record payments as they come in, and at the same time mark all the weeks paid for.

(For example: if you receive a $96 check, mark off eight weeks of deliveries.)

SUBSCRIPTION PAYMENT VERIFICATION (SAMPLE 3B) 19____

NAME	2/3 PD?	2/10 PD?	2/17 PD?	2/24 PD?	3/3 PD?	3/10 PD?	3/17 PD?	3/24 PD?	3/31 PD?	4/7 PD?	4/14 PD?	4/21 PD?
Allen, J.				Y	Y	Y	Y	Y	Y	Y	Y	Y
Garcia, H.	Y	Y	Y	Y				SAMPLE				
Kim, N.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Thompson, B.	Y	Y	Y	Y					Y	Y	Y	Y
# of Shares	3	3	3	4	2	2	2	2	3	3	3	3

NON-CASH PAYMENTS

WORK SHARE

You can offer members who wish to work regularly at the farm a *"discount"* on the share price. This discount is not usually considered equivalent to a wage. Rather, it is an arrangement beneficial to both parties: members learn more about farming, enjoy working outside, and feel more connected to the land that feeds them, while the farmer benefits from the energy they bring to the farm. Happy Heart Farm in Colorado writes about their working members:

> Twenty percent, or 14, of our members trade three hours of their time weekly for a 50 percent reduction in the cost of the annual share price of $480.
>
> There are some trade-offs. Much of the allure to the parties involved is the development of the very community that is being supported. We've found over these few years that it is the working members who really get all the deeper economic and social concepts that CSA is about. Their families become the long-term, committed, enthusiastic, word-of-mouth sales reps we need to keep up with the annual fluctuations of those who come and go. So those working members who put their time, sweat, hearts and hands into the land, crops and processes tend to be some of our best long-term members and advertisers. These economic rewards in themselves are almost enough to justify the program.
>
> But do we get any work done? Luckily, we are not a factory farm. Within the parameters of the CSA concept, we are not driven so much by the strictures of the "bottom line," all the food has been paid for in advance and all the harvest is spoken for. Not that there is any less work to do. There is just a rhythm to the dance, rather than a frenzy, and the working members share that dance with us and our interns. Supervision and planning play key roles in maximizing the blessing of those helping hands; they are working with us rather than for us. Time must be spent with each new task and with each new worker to show how, where and when, rather than to tell. Constant follow-up is also essential, because anything taken for granted will be a mistake.

For examples of what members can do to help the CSA, and for suggestions on working with volunteers and worksharers, see the chapter ***Members***.

Food Stamps

As for ***food stamps*** *(food coupons)* from the welfare office, they will not be strictly legal as payment for shares for most CSAs. According to **Food Stamp Program: Regulations Pertinent to Authorized Firms and Financial Institutions** (USDA Food and Consumer Service, PA-90, May 1995), to be authorized to redeem food stamps, you must be a "retail food store," defined as:

> 1) An establishment . . . whose eligible food sales volume . . . is more than 50 percent staple food items for home preparation and consumption;
>
> .....
>
> 4) Any private non-profit cooperative food purchasing venture, including those whose members pay in advance for food prior to receipt of food; and
>
> 5) A farmers' market.

In addition, "Food retailers **may not accept coupons before delivering the food** . . . . However, a non-profit cooperative food purchasing venture may accept coupons from a member of the cooperative at the time the member places a food order. The food ordered must be made available to the member within 14 days from the day the cooperative receives the member's coupons." [emphasis added]

It is this prohibition against receiving food stamps as advance payment which most hinders using food stamps for your CSA. You can, however, make an agreement with members using food stamps that they will buy shares each week, but only collect payment when you make delivery. This would mean forgoing the advance income, but still guarantees a market.

To redeem food stamps, you must first be authorized by the State. You do not, however, need to be incorporated as a business. Once you receive coupons as payment for allowable items and process the coupons properly, you take them and a special form to your bank, who redeems them for cash. If you want more information, call the USDA, Food and Consumer Services in Sacramento, **(916) 979-2941**.

WIC Vouchers

Women, Children and Infants *(WIC)* vouchers are not compatible with CSA. They require that retailers be licensed by the state to receive vouchers, and that they carry several different products at the same site: carrots, frozen juice, cereal, milk, and more.

Three Ways To Be Sure to Receive Your Payments:

- **Require all payment in advance.** This is more realistic for a subscription plan, but you can also cut off shareholders who don't make their payments by the required dates.
- **Be very persistent with people who have not paid.** This usually doesn't mean being hostile or aggressive. People may just need some persuasion and reminding to part with their money. Be their reminder.
- **Collect post-dated checks for your shareholding CSA.** You can allow shareholders to pay month-to-month, but collect all the checks for payment at the beginning of the year. The shareholder gives you a series of checks dated February 1st, March 1st, April 1st, etc. All the checks from different people for the same month are grouped together and filed away, ready for deposit when the time comes.

Note: You must honor the date on a post-dated check. In order to cash a post-dated check early, at the time you requested said post-dated check, you must have 1) advised your member in writing that you might cash the check early, 2) received written acknowledgement from the member that you advised them that you might cash the check early, OR 3) clearly printed a notice to this effect on an invoice which you gave to the member [Business and Professions Code, section 17538.6 (1995)].

Worksheet
Share Payments

This worksheet provides space for you to plan share payments for your CSA.

1. How often will members make payments *(check all that apply)*?

   _____ Annually
   _____ Two or three times annually
   _____ Quarterly
   _____ Monthly
   _____ Every four weeks
   _____ Other: _____

2. Will there be reduced-price workshares? Describe the price and work arrangement.

3. Who will keep these records?

4. How will these records be maintained *(computer, forms, etc.)*?

Community Supported Agriculture

...Making the Connection

Cost Calculation Worksheet

Year:

	Estimated Amount	Actual Amount
CAPITAL EXPENSES		
Tractor Equipment		
1)		
2)		
Hand Tools		
1)		
2)		
Irrigation Equipment		
1)		
2)		
Other		
TOTAL Capital Expenses:		
LABOR EXPENSES		
Farmer (____ hours x $ _.__ per hour)		
OR Salary		
Farm Laborers		
1) ____ hours x $ __.___ per hour		
2) ____ hours x $ __.___ per hour		
3) ____ hours x $ __.___ per hour		
4) ____ hours x $ __.___ per hour		
Distribution		
Administration		
Medical Insurance		
FICA		
Other		
TOTAL Labor Expenses:		

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Cost Calculation Worksheet *(continued)*

	Estimated Amount	Actual Amount
OPERATING EXPENSES		
Seeds, Plants, etc.		
Land/Buildings *(rent or payments)*		
Water		
Electricity		
Natural Gas/Propane		
Gasoline		
Diesel		
Compost and Manure		
Greenhouse Maintenance		
Row Covers		
Equipment Repairs		
Building Repairs		
Packaging *(Bags, boxes, etc.)*		
Scales		
Telephone		
Printing and Supplies		
Other		
TOTAL Operating Expenses:		

Community Supported Agriculture

...Making the Connection

Share Price Calculation Worksheet

Once Total Expenses are figured, Share Prices follow easily. With one type of share and once source of income, calculating the share price is simple:

Share Price = Total Expenses ÷ Number of Shares

Having different types of shares or other income for the CSA makes the calculation more difficult. The basic principle is the same, however: Total Income must cover Total Expenses.

Use this form to account for all sources of CSA income and compare them to Total Expenses. First, add up all the fixed incomes, including delivery surcharges and container deposits, and subtract them from Total Expenses. The result is the income which must be raised with share payments.

Play with the prices of shares until the price times the number of shares for all the different types bring in enough income. Use a pencil to keep this worksheet neater.

On the last line, Total Expenses should be equal to or less than Total Income from all sources.

	Year:	
	EXPENSES	**INCOME**
TOTAL Expenses		
Miscellaneous Income *(T-Shirt sales, tours, etc.)*		
Delivery Charges _____ *per share* x _____ *number of shares* =		
Container Deposits _____ *per share* x _____ *number of shares* =		
SUBTOTAL (Partial Income)		
SUBTOTAL (Total Expenses less Partial Income)		
Share Type 1 _____ *per share* x _____ *number of shares* =		
Share Type 2 _____ *per share* x _____ *number of shares* =		
Share Type 3 _____ *per share* x _____ *number of shares* =		
Other		
TOTALS (Income and Expenses):	=<	

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION/PLACER COUNTY
11477 E AVENUE, AUBURN, CALIFORNIA 95603 **(916) 889-7385** • FAX (916) 889-7397

Payment Schedule 1

This schedule can be used for **shareholding** and **subscription** CSAs with one to four payments per year.

For each member, write the name in the first column, payments made in the next several columns, and the total payments in the last column. The final row, which is the total for each column, tracks your income flow through the year.

The parentheses at the head of the payment columns are for dates. Use whatever dates you set for your CSA, or simply put First Quarter, Second Quarter, etc.

For more information, see the section on *Share Payments.*

Year:

NAME	AMOUNT PAID ( )	AMOUNT PAID ( )	AMOUNT PAID ( )	AMOUNT PAID ( )	TOTAL PAID
TOTALS:					

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION/PLACER COUNTY
11477 E AVENUE, AUBURN, CALIFORNIA 95603 (916) 889-7385 • FAX (916) 889-7397

Payment Schedule 2

This payment schedule can be used by CSAs which allow up to 12 payments per year. The first column is for members' names. There are 12 payment columns, so a new column can be used for each month. Space is provided in each column to write both the amount paid and the date it was paid.

In the last column, total each member's payments. The bottom row allows monthly tracking of income.

Year:

NAME	AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		TOTAL PAID
TOTALS:																							

Payment Schedule 3

This schedule is for **subscription** CSAs whose members pay for short terms, such as bi-weekly or monthly. It can be used in conjunction with the Payment Verification Calendar that follows, as described in the section on ***Share Payments.***

At the head of each column, write delivery dates for an entire quarter. In the first column, write the members' names.

Record payments as they come in, putting the amount and date in the column labeled with the next delivery date. On the ***Payment Verification Calendar***, mark off the number of weeks paid each time a check is received and recorded on this form.

There are places to total payments per member per quarter as well as income received by each delivery date. *(For more information, see the section on Share Payments).*

Year:

PAID BY: *(DELIVERY DATE)*																								
NAME	AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID		AMT PAID	TOTAL PAID
TOTALS:																								

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION/PLACER COUNTY
11477 E AVENUE, AUBURN, CALIFORNIA 95603 (916) 889-7385 • FAX (916) 889-7397

Payment Verification Calendar

Use this form to keep track of which members receive shares each week, in conjunction with ***Payment Schedule 3.***

Each time a payment is recorded on ***Payment Schedule 3***, mark off on this form the deliveries for which the member is paying. When figuring how many shares to harvest and distribute on a date, go to that column and count the marks for paid shares.

												Year:	
NAME	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?	( ) PAID?

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION/PLACER COUNTY
11477 E AVENUE, AUBURN, CALIFORNIA 95603 (916) 889-7385 • FAX (916) 889-7397

Legal Issues

Legal issues for CSA farms are similar to other farms'. They are also complex and different for every case. Legal information specific to CSA is scarce — much information in this chapter is adapted from non-CSA sources.

People starting farms and farms starting CSA projects may want to contact professionals for answers to business and legal questions. They can also do much research on their own. Public libraries have many books and workbooks on taxes and business, as do bookstores.

The three main areas of concern discussed here are:

Community Supported Agriculture

Land Tenure

This section discusses some options for securing land for a CSA project.

CSAs just starting which do not yet have land and ones expanding their acreage should remember that owning and leasing are not the only two options. Some institutions, such as schools, would enjoy sponsoring a CSA that grew crops on their property. Other land may be available from people who have rural property but no time to maintain it. They may agree to let you farm it in exchange for keeping an eye on the place, clearing flammable vegetation, or doing some other maintenance.

Whatever the arrangement, try to secure the land for several years at least. This allows you to become familiar with the soil and microclimate, to build up the soil structure and fertility, and to accumulate members and a reputation. In addition, you may have to work the land for a few years to get organic or bio-dynamic certification.

Land tenure, the stability of a farmer's right to use a property, is an important issue for CSAs. It ranks with low share prices as a main reason for CSA project failure. Embryonic efforts are underway to link the issue of land tenure *(or access to land)* with CSA. Some of these efforts are looking at community land trusts as a possible solution.

Land Trusts

Land trusts fit well with CSA. CSA stresses the farmer-consumer relationship, suggesting that cooperation is necessary for small farms and ecologic practices to survive in an economy based on marketplace competitiveness. Land trusts (*or conservancies*) also skirt the marketplace by removing land from the market altogether.

Unstable land tenure is a main reason for CSA failure.

Land can increase in value for reasons unrelated to farming activities. Urban and suburban sprawl, new highways and water projects can all increase land value to the point where the current owner-farmer cannot afford the taxes on it, the owner removes a tenant farmer to sell the land for development, or another small farmer cannot afford the land when it is sold. Land trusts, which are non-profit organizations, set land aside for specific uses, holding it so that it won't be developed.

University of California Cooperative Extension/Placer County
11477 E Avenue, Auburn, California 95603 (916) 889-7385 • FAX (916) 889-7397

Community Supported Agriculture

Agricultural land trusts earmark land for farming only. They can arrange for a piece of property to remain a farm in perpetuity, or for a long but finite length of time. They can also make other provisions, such as that the farm be organic or bio-dynamic, or that the owner live on the property. Just as a state park can preserve a forest or lake from being developed by builders, so an agricultural land trust can preserve a farm.

An organization in Connecticut called Equity Trust is attempting to foster this link between CSA and land trusts. It can provide assistance to farms looking to become land trusts and to property owners who want to preserve their rural land. Although a land trust itself, the organization prefers to link owners with local land trusts, so another effort is putting interested people and organizations in contact with one another. It has also started a fund which can be used to purchase land for CSA land trusts.

CSA and land trusts share similar concepts of resource control.

Equity Trust holds the **conservation easement** to Live Power Community Farm (LPCF) in Covelo, California, and was instrumental in Steve and Gloria Decater's efforts to preserve their farm. When LPCF came up for sale, the Decaters could not afford it. However, by putting 55% of the land's price in a conservation easement to be held by a land trust, and retaining 45% as the agricultural value of the land, the Decaters, their CSA members and Equity Trust were able to raise the money necessary to purchase the land. Equity Trust holds the development rights to the land, ensuring that it will remain in agriculture; the Decaters hold the farming rights. Furthermore, the agreement also provides that the land shall be farmed bio-dynamically or organically by a serious resident farmer.

Legal Form of the Farm or CSA

This section discusses the three business forms and issues to consider when choosing one.

CSAs generally come out of an existing farm, school or other entity. They tend to follow the organization of the sponsoring group. That is, farms who start CSA projects don't usually alter their organization, and schools generally retain the project as part of the school. Also, members don't tend to accrue any business interest in the farming operation.

CSA projects which create their own farm or garden, or alter an existing one, need to decide on a legal form for the business. The choice of form should reflect the goals and objectives of the individuals involved.

The three basic business forms are: sole proprietorships, partnerships and corporations. This section describes each of these forms and compares some of their advantages and disadvantages.

The Three Basic Business Forms

Of the three basic legal forms of business organizations — ***sole proprietorships, partnerships*** and ***corporations*** — only corporations *(which may be organized for profit or not for profit)* have a truly separate legal status apart from the individuals involved. The other forms are generally viewed as individuals carrying on a business for profit. This is an important distinction with many ramifications, particularly in the tax and liability areas. All business forms are governed by state law, but corporations are **creations** of law — they do not exist until certain legal steps are taken.

Most farms are **sole proprietorships** or **partnerships**, regardless of whether they are involved with CSA.

The cooperative nature of CSA can raise some interesting questions, especially if the project forms as a non-profit or for-profit corporation. A few of them are:

- **Who controls the land** – how it is used and what happens to it over the long run?
- **Is the farmer an owner or an employee of the firm?** How about the members?
- **What are the farmers' and members' rights** to real property and improvements made to the land or the farm?

For growers interested mainly in establishing a loyal clientele for their farm, these issues do not need to arise.

Sole Proprietorship

Sole proprietorship is the most common business form for farms.

A **sole proprietorship** is an individual who operates a business. It is the simplest and most common business form.

A sole proprietor has complete and sole control over the finances and management of the business and is subject to very few legal requirements. Paperwork is minimal. A sole proprietor must file a fictitious name statement if the farm uses a name other than that of the owner to let the public *(and creditors)* know of the existence of the business. The statement also offers some protection against others using the same name. In many communities, a sole proprietor must also obtain a business license.

The sole proprietor pays income taxes on the income received from the business and must file the appropriate federal and state income tax forms to report the income and expenses.

A sole proprietor is subject to unlimited personal liability for all obligations of the business.

Partnerships

A partnership occurs when two or more people join together to carry on a business for profit. Partnerships may be either **general partnerships** of **limited partnerships**.

General Partnerships

General partnerships are governed by the Uniform Partnership Act (Corp. Code, § 15001, et seq.). General partners may contribute money, property or services to the

partnership. All general partners have an equal right to share in decision-making and management of the farm or CSA project (Corp. Code, § 15018 (e)). However, some general partners may wish to be less involved. This is permissible. However, whatever the level of involvement, each general partner is **personally liable** for all partnership obligations. If a creditor is unable to collect from the other partners, the remaining partner(s) is legally bound to pay the whole amount (Corp. Code, § 15015). This is one of the major drawbacks of the general partnership form.

General partnerships may occur informally, without a written agreement. Although this is legal, it is not a good idea. It is extremely easy for disagreements to arise in a partnership. Disputes over workload, philosophy, pay and other matters are common. To forestall these problems, a written partnership agreement should be developed to cover topics including:

- ✓ Partnership name;
- ✓ When the partnership started and how long it will continue;
- ✓ The purpose(s) for which the partnership is founded;
- ✓ What is being contributed to the partnership *(cash, property, effort)*;
- ✓ How future financing will be arranged;
- ✓ Management responsibilities and the decision-making process;
- ✓ How the profits and losses will be distributed among the partners;
- ✓ Accounting procedures, including whether the books are on a cash or accrual basis or on a calendar or fiscal year;
- ✓ How disputes, including expelling a partner, will be handled/resolved (criteria, voting rights, mediation, arbitration provisions);
- ✓ What happens if one partner wants to sell an interest;
- ✓ Whether the business will continue upon retirement or withdrawal of a partner and on what terms;
- ✓ How to determine the value of the partnership interest of the partner who is leaving; and
- ✓ Procedures to end the partnership.[1]

Limited Partnerships

The limited partnership is more complex form of operation. For example, the California Revised Limited Partnership Act, effective July 1, 1984, (Corp. Code, § 15611, et seq.) requires a limited partnership to prepare a written agreement (Corp. Code, § 15621).

A limited partnership is made up of one or more general partners and one or more limited partners (Corp. Code, § 15611 (j)). A certificate of limited partnership must be filed with the Secretary of State (Corp. Code, § 15621). Limited partners are often passive investors in a business. As such, their exposure to liability is generally limited to the amount of their investment. Filing the partnership certificate is an important step in identifying the limited partners and assuring that their limited role and liability is recognized should a creditor attempt to collect from a limited partner.

The 1984 limited partnership act also imposes a number of record-keeping and filing requirements upon limited partnerships which should be reviewed thoroughly (Corp. Code, § 15615).

Corporations

Unlike sole proprietorships and partnerships, a corporation is a separate legal entity. A corporation has an existence independent of the individuals who serve on its board or as its employees. One of its most salient features is the continuity of existence which flows form its status as a separate entity.

There are many kinds of corporations. As creatures of law, they are all extensively governed by the Corporations Code. The major distinction is between corporations operated for **profit** and those operated **not-for-profit;** *In California, not-for-profits are known as nonprofits.*

Because of their educational and environmental benefits, CSAs can operate as non-profit corporations.

This distinction needs clarification. Many people believe that **not-for-profit** means a business cannot bring in more money than it expends. This is not true. The key feature of a not-for-profit corporation is that whatever money in excess of expenses which it receives may not be given away *(distributed)* to shareholders or other individuals. Instead, the excess must be turned back into the business to enhance the nonprofit purpose.

For Profit Corporations:

In California there are several types of for-profit corporations. Each type is subject to special rules concerning formation, organization, operation, taxation and dissolution. A detailed discussion of these different forms is beyond the scope of this chapter. However, people interested in operating as a for-profit corporation are urged to explore carefully the various forms since there are significant legal and tax advantages and disadvantages of each.

Non-Profit Corporations

Since January 1, 1980, California nonprofit corporations have been governed by a new nonprofit corporation law. This new law divides nonprofit corporations into three categories, each governed by a special section of the Corporations Code. These three categories are:

1. **Nonprofit Public Benefit Corporations** (Corp. Code, § 5110, et seq.);
2. **Nonprofit Mutual Benefit Corporations** (Corp. Code, § 7110, et seq.); and
3. **Nonprofit Religious Corporations** (Corp. Code, § 9110, et seq.).

Issues in Selecting the Business Form

This list indicates issues to consider when deciding on the form to use for a farm or CSA:

- Costs of forming the business
- Raising funds (capital)
- Liability
- Control and management
- Continuity of existence
- Taxation considerations
- Selling the business/going out of business

- Paperwork burdens
- Limitations on personal gain
- Scrutiny by public agencies
- Community control

For many if not most CSA projects, the appropriate legal form is obvious. However, new farms or projects should consider their options. Furthermore, some CSAs may want to strengthen community control and involvement started by the marketing arrangement and explore cooperative or non-profit arrangements

CSAs forming from scratch may want to explore forms other than sole proprietorship.

1 This list of topics to be covered was developed by Clifford, D. & Warner, R. ***The Partnership Book***, California Edition, Nolo Press, Berkeley, CA, 1981, pp. 75-76

Liability & Insurance

This section explains liability and describes different types of insurance.

Liability is a legal concept which businesses dealing with the public or having employees should understand. Insurance is a big issue for all businesses, including farms. Both affect CSAs.

These two are included together because CSAs which bring members to the farm or which host events should consider insuring themselves for accidents on the farm for which they may be liable. This is not necessary — some CSA farms are insured and some aren't. However, you should be aware of these concepts and risks and make an informed decision.

As always with legal issues, it is a good idea to consult with a professional if you have questions.

LIABILITY

The best advice regarding liability can be summed up in two suggestions:

- **Prevent injuries by complying with laws and regulations, and maintaining a safe environment for workers and members; and**
- **Buy appropriate insurance**

This section elaborates on these suggestions. It also sets a framework for thinking about liability, describes the techniques to help prevent liability, and sets out insurance possibilities.

Liability is a broad concept. It includes both criminal and civil liability. Criminal liabilities *(jail sentences and fines)* occur when a person violates a law which contains criminal penalties. Civil liability *(often money damages)* can arise from laws which give others the right to sue to protect their interests *(civil rights laws)* or from failure to meet the obligations of private agreements *(contracts and leases)*.

NEGLIGENCE

Negligence refers to the nonintentional infliction of harm by someone who is nonetheless at ***fault*** for the harm. The law recognizes that some things happen that cannot be prevented

through the exercise of due care. If the injury is no one's fault, it is an ***accident***.

Elements of a Negligence Case

Under the basic rules of negligence, the injured person must show four things to establish liability. If any one of these elements is missing, there is no liability for negligence.

To be negligence, your failure to use the proper care must have caused the injury.

① Duty to Exercise Due Care

Ordinarily, people are liable for injuries only if they are actively careless. They must use due care to prevent foreseeable injuries.

② Failure to Use Due Care *(Breach of Duty)*

Once a duty is established, courts evaluate the behavior against a basic standard of care, often referred to as the *reasonable person* standard. The question is posed, *"would a reasonable person charged with the same duties exercise the same degree of care under the circumstances?"*

③ Proximate (Legal) Cause

The cause in most negligence cases is rather straightforward and it is not difficult to see how the action caused the injury. The issue gets complicated where there is more than one act of negligence. The basic rule is that you are liable for your negligence even if someone else is **also** liable.

④ Injury

The person making a claim of negligence must show that they have been injured and are entitled to damages. This is generally a very straightforward matter, although the calculation of the amount can be complex.

Farm Responsibilities Toward Employees

In California, employers are required by law to carry workers' compensation insurance to take care of injuries to employees which occur during the course of their employment. Employee injuries, for the most part, are compensated through workers' compensation, a no-fault system. Employers are required to post notices concerning their workers' compensation responsibilities. Inexpensive workers' compensation insurance is available from the State Compensation Insurance Fund and from private insurance brokers. Volunteers in nonprofit organizations may be included in the workers' compensation policy if the board of directors approves the inclusion and they are counted in the insurance application.

Farm Responsibilities To Others

A farm may be liable for negligence to others who are injured on the premises or as a result of negligence by a center employee.

Who is Liable?

The basic rule is that each individual is liable for his or her own negligence. However, in addition, an employer is liable for the negligence of employees when the negligence occurs in the course of employment.

The worst case arises when there is no insurance. The injured person is likely to sue everyone involved in the hope of finding a defendant who has the money to pay damages.

Legal Devices to Shift or Avoid Liability

There are a number of legal devices which can play a part in a risk management program. Since public policy tends to discourage technical defenses which avoid liability, most devices determine who will bear responsibility if and when an injury occurs.

Used in conjunction with an appropriate insurance package, devices such as incorporation *(to protect board members from personal liability for acts of negligence by*

employees), and indemnification provisions in bylaws, leases, contracts and other legal documents can help the parties involved anticipate and make responsible preparation for injuries which might occur.

These devices will not apply to sole proprietorships and partnerships.

Prevention of Harm and Other Precautions

Safety Program

The best safeguard against liability is to comply with applicable laws and regulations and have an ongoing safety program. Consider also what tools and equipment members will use. OSHA requires safety training for farm workers who use tractors and other potentially dangerous equipment. You may want to limit use of tractors, power tools, ladders and other equipment.

An ongoing safety program should include accident prevention training and regular review of accidents which have occurred on the farm. Farms should maintain a record of all injuries noting the name of the person, date, time of day, piece of equipment and people involved. These reports should be reviewed periodically to see if patterns emerge which suggest corrective measures.

Safety measures such as doing the proper training, having first aid supplies and keeping emergency numbers by telephones are good ideas for any farm or business.

Also, keep a list of emergency numbers, including 911 if used in your area, near every telephone.

The following suggestions should be included in any post-accident planning:

If you think the injury may be very serious and/or you do not feel able to safely transport the injured person — for example, in the case of broken bones, multiple injuries, or serious head and neck injuries — always call an ambulance *(dial 911 in most areas; no coin is needed for most pay phones)*. If the situation is a life-threatening emergency requiring you immediately to render some form of first aid *(e.g., mouth-to-mouth resuscitation)*, you should give only what aid you are capable of. According to California's *"Good Samaritan"* law (Health & Safety Code, § 1799.102), a person rendering emergency care at the scene of an emergency

cannot be held liable for damages resulting from any act or failure to act. However, the person rendering aid is only protected as long as *(a)* professional medical care was unavailable, and *(b)* he/she acted in good faith without expecting to be paid for his/her efforts.

If the injury is less serious but needs immediate attention and you feel able to safely transport the injured person yourself, decide whether to leave immediately or call 911.

If the injury is not very serious, it would be better to allow the injured person or his/her family or friends to assume responsibility for obtaining the appropriate medical care.

Property Damage

Several things are recommended to diminish risks to your property and your CSA:

- Inspect for hazards.
- Store important documents and equipment safely.
- Make contingency plans in the event of a major loss. This plan should include some financial planning. For example:
  - ***What are the farm's continuing costs*** *(regardless of whether it is operating or not)?*
  - ***Are there volunteers who can be called when needed to help with clean-up tasks after the damage?***

INSURANCE

Like other endeavors, the operation of a farm is subject to human error. Fortunately, there is insurance to provide a safety net when, even after best efforts are expended, someone or something is harmed.

It is essential that you read your insurance policies carefully to make sure that you really understand all of their provisions. It is also important to note any exclusions in your policies. If you find there are certain provisions you don't understand, ask your insurance agent or broker. If you still have questions, you might seek the help of a lawyer.

It is possible to insure against almost any possible risk. However, most farms can only afford very basic kinds of insurance. Therefore, it is important that to buy insurance only after a careful assessment of specific needs and budgetary constraints. In addition, it may be worthwhile to shop around among various insurance providers as insurance costs and coverage can vary dramatically from one agent to the next.

LIABILITY INSURANCE

Liability insurance is purchased to cover injuries that occur because of negligence. If you have general liability insurance, the insurance company will defend you if you are sued. If the court decides that you are **liable**, the company will pay the money judgment up to the limits of the policy.

Liability insurance can be purchased to give general liability coverage, specific coverage, or a combination of the two, purchased as a *package*. If you already have liability insurance for your farm, check that it covers CSA activities.

ADDITIONAL INSUREDS

EMPLOYEES

Your program's general liability insurance will cover the program if it is sued because of the negligent acts of its employees, but only when they were acting within the scope of their duties. However, if employees are also named in the suit, the policy usually won't pay for their

defense or any judgment against them. This can be remedied by adding your employees as **additional insureds** on the general liability policy.

Volunteers

Volunteers usually are not covered by the program's liability policy. Programs that use volunteers may have difficulty adding volunteers as additional insureds or buying separate liability coverage.

When a program seeks to cover its volunteers, it helps to be honest and reassuring with the underwriter about the volunteers' daily activities. The insurer will want to know everything the volunteer will be doing that might affect others, as well as anything that might conceivably happen to him/her.

Consider how often members come out to the farm. Are they coming several times a week, or just once a year? Think about what your members will be doing: are they just picking up shares, or are they doing fieldwork?

Landlords and Funding Sources

Frequently, funding sources as well as landlords, will require that they be named on your insurance policy as additional insured. This means that if they are named as co-defendants in a suit against you, the insurance would cover both the cost of their defense and any part of the settlement or judgment against them.

Accident Insurance

Liability insurance is not *"no fault"* coverage. Thus, if someone is injured while at your farm, but there is no one at fault, your liability insurance policy will not cover the accident. For this reason, an additional policy covering accidental injuries is worthwhile to consider. Accident insurance is generally available at very reasonable costs.

VEHICLE INSURANCE

A good auto insurance policy will cover most of the costs following an auto-related injury. A good policy will pay for your defense in the event of a lawsuit, and will pay any settlement or money judgment *(up to the policy limit)* that you would otherwise have to pay.

Often, insurance companies will include a **deductible** in the policy: an amount the insured must pay out of his/her own pocket before the coverage takes over. Usually, a policy with a higher deductible is the least expensive. Insurance should be considered a large *"rainy day fund,"* to be dipped into only in the event of a large damage claim downpour.

The following is a list of some of the more common types of coverage for vehicles. These different types of insurance usually are written with a deductible of $50 to $250. Often an agent will offer a package of several different types of coverage at a rate less than the separate purchase price.

California requires vehicles to carry certain types of insurance in certain amounts. Be sure to check with your local office of the Department of Motor Vehicles or the Secretary of State.

Types of vehicle insurance are:

- Bodily Injury Liability
- Property Damage Liability
- Uninsured Motorist Protection
- Collision
- Medical Payments
- Under-insured motorist protection
- Comprehensive
- Fire, Theft, and Combined Additional Coverage for Physical Damage

Property Insurance

Property insurance can be purchased to protect you for three different kinds of damage:

- **Damage to your building** (*"real property"* or *"realty"* in legalese)
- **Damage to your equipment, supplies, or records** (*"personal property"*)
- **Consequential damage to you or your project** (e.g., the cost of your salary while the farm isn't operating)

Coverage for both realty and personal property can be purchased on either a **named-perils** basis or an **all-risks** basis. Insurance written on a **named-perils** basis will cover your property only for damages caused by peril specifically named in the policy (*e.g., only damage from fire, lightning, vandalism or other peril listed on the coverage page)*. **All-risks** insurance will cover your property for damages from all perils that are not specifically excluded in the policy.

If you rent or lease space, your landlord will usually carry fire insurance on the building. However, some leases require that tenants purchase their own or additional fire insurance on the building.

An important exception to realty and personal property insurance is flood insurance, which can only be purchased from the federally-administered National Flood Insurance Program. If you live in an area where flooding is a risk, contact your local office of the Federal Emergency Management Agency (FEMA) for information on how to purchase flood insurance.

Insurance policies are written based on either the *"actual cash value"* or the *"replacement cost"* of the property. The actual cash value is the depreciated value of the property after use or wear. The replacement costs is the value of replacing the exact same piece of property, for example, the same square footage of the building or the same piece of equipment at current market rates.

RESOURCES

GENERAL BUSINESS INFORMATION

McKeever, M. ***Start Up Money: How to Finance Your New Small Business***, Berkeley, CA, Nolo Press, 1st Edition.

Warner, Ihara & Sherman. ***Homestead Your House***, Berkeley, CA, Nolo Press, 5th Edition

Small Business Administration: 660 J Street, Suite 215, Sacramento, CA 95814; (916) 498-6410.

LAND TRUSTS

American Farmland Trust: 1949 Fifth Street, Davis, CA 95616; (916) 753-1073.

Equity Trust: Chuck Matthei, (203) 376-6174.

Nevada County Land Trust: (916) 265-0430.

Placer Land Trust: Scott Dalton, (916) 791-0014; Nature Center (916) 621-1224.

Trust for Public Lands: 116 New Montgomery Street, 4th Floor, San Francisco, CA 94105; 415/495-4014, fax 415/495-4103.

SOLE PROPRIETORSHIP

Kamaroff, B. ***Small Time Operator***, Berkeley, CA, Nolo Press, 2nd Edition

PARTNERSHIPS

Advising California Partnerships. Berkeley, CA, California Continuing Education of the Bar, 1975 (Supplement 1983)

Clifford, D., and Warner, R. ***The Partnership Book: California Edition***, Berkeley, CA, Nolo Press 1981

CORPORATIONS

Organizing Corporations in California. Berkeley, CA, California Continuing Education of the Bar, 2nd Edition, 1983

Advising California Nonprofit Corporations. Berkeley, CA, California Continuing Education of the Bar, 1984

CORPORATIONS (CONTINUED)

Mancuso, Anthony. ***The California Nonprofit Corporation Handbook,*** Berkeley, CA, Nolo Press, 4th Edition

Non-Profit Resource Center: 828 "I" Street *(in the Central library),* Sacramento, CA 95814, 916/268-2772

Appendix

This appendix offers additional information for certain topics from the main text. In the main text, appendix topics are marked with this symbol [I] .

Topics are in alphabetical order:

Community Supported Agriculture

Brochures

A brochure can be fancy or plain. You can type it, create it with a computer, or write it by hand. Above all, make it **clear, easy to read,** and **interesting** to look at.

Many CSAs have brochures explaining the project and how to get involved.

Before You Begin

- Have a clearly defined target audience.
- Have a clearly stated objective of what you want your brochure to accomplish.
- Collect and analyze other brochures. "Borrow" the features you like; avoid those you don't like.

Writing

- Quickly and clearly tell readers how they benefit from CSA in general and your project in particular.
- Make every word work; edit the freeloaders.
- Write at a level your audience is comfortable with; use jargon sparingly, if at all.
- Use active verbs.
- Be informal, friendly in tone.
- Don't include anything that doesn't accomplish your objective.

Layout

- Presentation is as important as content. Try to make your brochure as visually appealing as possible.
- Select a typeface and size (usually 10 to 12 point) that is easy to read.

- Headlines should be two to 2½ times as large as the text type size. Upper and lower case offers more visual variety than all capital letters.
- Use lots of white space. Avoid the urge to overwrite for the space.
- Boxes, bold face type, italic type, and bullets (such as those used here) help draw attention to important points.
- A ragged right margin gives a more informal appearance than an even right margin, and is usually preferred.
- Color is nice, if you can afford it; but don't overuse color or it will lose its impact.
- A lot can be done with black and white and one other color. Work with your printer.
- A **good** photograph is worth a thousand words; a bad photograph is worth nothing.
- Use clip art to support your message, not for decoration.
- Keep it simple.

SIZE

Common brochure sizes are 8-1/2 x 11 inches *(6 panels, two folds)* or 8-1/2 x 17 inches *(8 panels, three folds)*.

(Adapted from notes by **Gary Beall**, Extension Communications Specialist, UC Davis)

Community Supported Agriculture

Meetings

For a **participatory** CSA, the purpose of an interest meeting is to determine support. You can advertise this meeting by posting notices anywhere potential members might be: health food stores, other retail businesses, community bulletin boards. When you give presentations to groups, announce the meeting and invite everyone interested in CSA to come.

At this meeting, introduce your farm. Show pictures or slides of the farm in different seasons and of your products. Include shots of people and animals on the farm. Bring in something you've grown for a tasting. Make people excited about establishing a direct link with a farm. What makes an interest meeting different from a presentation to a civic organization or community group is that you want to try to leave this meeting with a few volunteers who will form your core group.

Here are some guidelines that apply to this interest meeting and to subsequent core group meetings:

Keep meetings short and to-the-point.

- **Establish a time limit and stick to it.** Meetings that last an hour to an hour and a half are long enough to get something done, but not so long that you lose people's interest. Set time limits for each agenda item and stick to them, too. These limits help keep the meeting focused.
- **Have an agenda for every meeting.** People should know why they are meeting – introduction to CSA, budget, crop plan, distribution, whatever. Focus on the agenda topics, and avoid tangents until the central topics are handled.
- **Decide how to decide.** Will you make decisions by consensus? two-thirds vote? majority vote? Who can vote: anyone who shows up or just certain people? Will you decide casually or formally?
- **Let everyone speak.** Meetings tend to be dominated by a few people. Everyone needs to have a chance to speak, because those quiet people are sometimes the most perceptive. It helps to go around the room and have each person comment in turn, especially when a meeting is about to make a decision.
- **Have an open floor.** This allows the introduction of new concerns and the handling of miscellaneous items. Set a time limit for this, too.

News Releases

Having a newspaper run an article about your CSA project is cheap advertisement to a large audience. This approach isn't *targeted*, so you can find potential members you otherwise would have missed.

Writing an effective news release requires sticking to conventions about the style of writing, content, and form the release takes. The rest of this chapter will describe some of these conventions.

Form of Your Article

First, you need to consider the purpose of your story, because it determines the form of the article. There are three basic types of news stories:

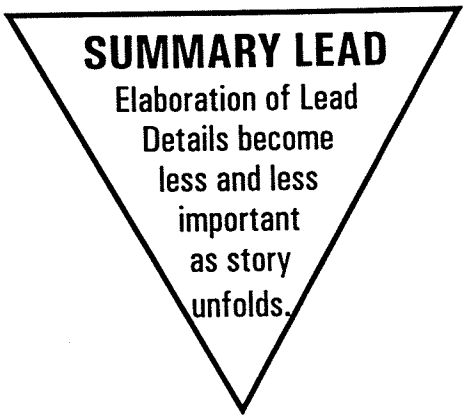
Newspaper articles on your farm are FREE advertising.

① **Advance stories** give important information about something that is going to happen.

② **Follow-up stories** tell about events that have already happened.

③ **Feature stories** provide information and interpretation, instruction or entertainment. Many CSA articles fall into this category.

Advance and follow-up stories have a definite structure— they get to the point fast. The most important facts of the story should be in the first sentence or two *(the summary lead)*, with details following in order of importance:



This way of ordering facts is called the *inverted pyramid*. This type of structure is important because:

- Readers who haven't the time or the desire to read the whole story can get the most important information at a glance.

- If the newspaper doesn't have enough room to print the whole story, it can easily shorten it by chopping off the end – without losing the *meat* of the story.

It may help you to list the facts in order of importance before you start to write.

Feature stories seldom follow the inverted-pyramid format. The first paragraph sets the tone and grabs the reader's attention. It can't stand alone as a summary of the facts. If you try your hand at a feature story, be as creative as you wish. Remember, though, that the rules for good writing still apply.

WRITING

Most news stories can be summed up by the ***five Ws and an H***:

- ✓ **WHO?** Who is the subject of the story?
- ✓ **WHAT?** What happened?
- ✓ **WHERE?** Where did it happen?
- ✓ **WHEN?** When did it happen?
- ✓ **WHY?** Why did it happen? Why is it important?
- ✓ **HOW?** How did it happen?

The summary lead usually answers the most important of these questions. It may answer more than one. Keep in mind what makes your story ***news***, and present those facts in the summary lead.

After the lead, the remaining facts should follow in order of importance. Details and background information usually appear at the end of the story.

After you have planned your story, follow these rules of writing to assure that your story will be easy to read:

- ✓ ***Stick to the facts.***
- ✓ ***Use short sentences and short paragraphs.***
- ✓ ***Use active verbs.*** *"He threw the ball" is better than "the ball was thrown by him."*

- ✓ ***Use short, simple words.***
- ✓ ***Avoid clichés and complicated constructions.***

EDITING

When you have completed your story, read it carefully to check for these points of accuracy, grammar and style.

As you prepare your article for submission, check and double-check everything.

- ✓ ***Check and double-check your facts:*** *spellings of names; meeting dates, times and places; etc.*
- ✓ ***Check each sentence for mistakes in spelling or grammar.***
- ✓ ***Check for errors in style,*** *such as improper capitalization or punctuation.*
- ✓ ***Eliminate clichés and empty phrases.***

PUBLICATION

Preparing your story for publication is a matter of typing it carefully in the standard format preferred by newspaper editors.

At the top of the page, type your name and telephone number, so the editor knows where the story came from and how to get more information. Leave the top third of the page blank so the editor can mark the copy for a headline, size of type, etc. Double or triple space the text for ease of reading. Keep the whole thing to two pages, tops.

If you will be submitting stories to one newspaper regularly, ask the editor how she or he prefers to have the story prepared.

PHOTOGRAPHS

You may submit photographs by themselves or with a story. All photos should have a ***cutline*** — the written explanation under the picture. Cutlines vary in length and purpose. Mug shots may require only the name of the subject. Candid action photos should be explained. You should name everyone in the photo, if possible, usually from left to right.

Some rules for cutlines are:

- ✓ ***Write short, clear, complete sentences.***
- ✓ ***Make sure the names are spelled correctly,*** *and that they match up with the people in the photograph.*
- ✓ ***Identify people by their places in the photo,*** *not by physical characteristics.*

SUBMISSION

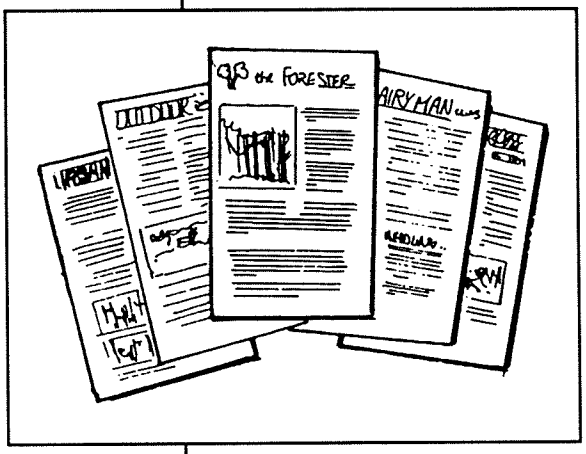
Submit your story by mailing it to the newspaper or dropping it off. Be sure to keep their deadlines. You may find it helpful to get to know some of the staff of the newspaper. They can tell you when the busy times are, which columns or sections could use your type of article, and how you can polish your releases.

Community Supported Agriculture

Newsletters

CSAs commonly communicate with members by newsletters.

Newsletters are short, regularly produced publications. Nearly all CSA farms have them. Like share notes, they let members know what is going on at the farm. However, they come out less frequently than share notes, maybe four times a year. Because you have more time to put one together, you can explain more about the farm, about how you grow the food, about changes that have happened or that you expect. You can also communicate about the CSA, lining up members for the next season, changing drop-off times, and soliciting volunteer help. Some newsletters also include reflections from farmers, workers, or members.



Newsletters are useful for CSAs because they are inexpensive and easy to produce, and their content and tone can be tailored to your audience. On the other hand, they reach a small, select group of people, so they do not create general public awareness of your project or any special events.

Above all, keep it simple. The newsletter is a sideline to the CSA and farming. The guidelines and suggestions that follow do not apply in all cases. A one-page general letter to your members that comes out occasionally may be all you are interested in doing.

Planning

A newsletter relies on consistency of writing, appearance and scheduling for its success. When your readers can expect a consistent delivery of information written just for them, they'll look forward to receiving your newsletter.

Try to schedule for at least four issues per year. If you then find that you have to scrape to come up with material, space your issues farther apart. If you have too much material, add a few issues. Resist the temptation to put out a newsletter

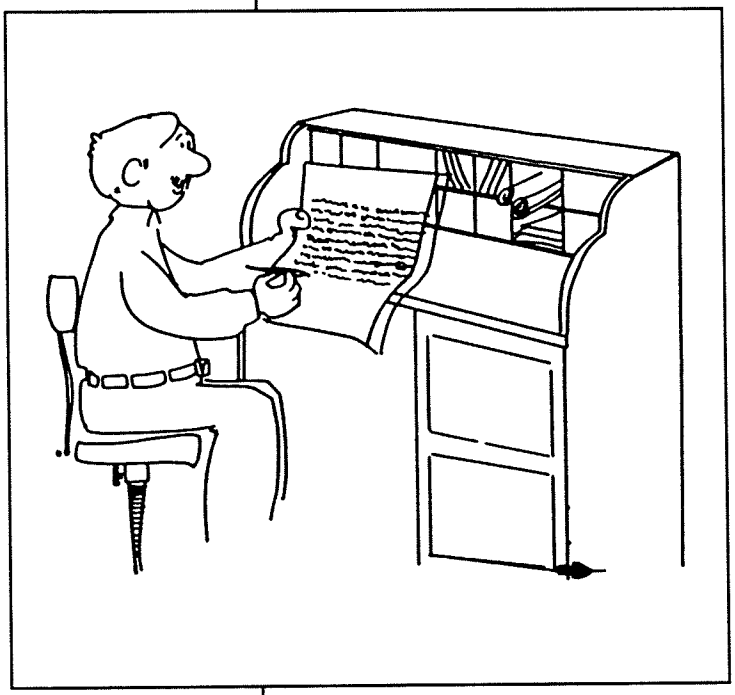
"whenever there's enough material." Your members need to be able to depend on your schedule.

Common types of features found in newsletters are:

- **Educational** – present new material.
- **Digest** – summarize material from many sources.
- **Social** – report human-interest stories designed to promote group unity.
- **Calendar** – keep readers up-to-date on happenings at the farm and elsewhere.

MATERIAL

You can use many sources for newsletter material – contributions from members, community calendars, journals, CSA information sources, etc. Gather the material and coordinate it so it fits your newsletter and your members. You are the ultimate judge of what best suits your CSA, but keep the following in mind:



- The material should be new to your readers. Material from a letter or journal your readers have not had access to is good to use.
- Before you use copyrighted material, get written permission from the author or copyright holder. If this is impossible, rewrite the material in your own words.
- Be sure the material is timely. It won't do much good to publicize a January meeting if your newsletter won't come out until March.
- Always consider: *"Does this material fit my membership and purpose?"*

A CSA newsletter should have a light personal style. If the material you get from other contributors or other sources has a different tone, consider rewriting it. You will probably also be writing some original material. Good newsletter writing follows these suggestions:

- **Make the point.** News stories traditionally present the most important material first – ***who, what, where, why, where and how***. Your writing doesn't need to stick with this format, but each piece should have a clearly identifiable purpose behind it.
- **Use short sentences.** Average sentence length should be 16 to 19 words.
- **Use short paragraphs.** Average paragraph length should be two to five sentences.
- **Edit and proofread.** *Are your spelling and typing accurate? Are your facts correct?*
- **Use active verbs.** Instead of: *"A decline in enrollment was noted,"* try *"enrollment dropped."*
- **Use simple words.** Even a technical topic is understandable if you use everyday words to tell about it.

ELEMENTS

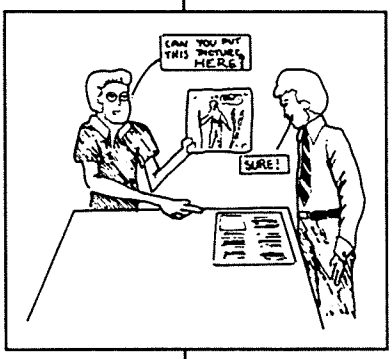
MASTHEAD

The masthead catches the reader's eye and can set the image for your whole newsletter. It should include the name of the newsletter, the name of your farm, the date, volume number and your farm or CSA logo.

You can design your own masthead using press-on letters *(available at most book or business supply stores)* and simple art, or generate it on a computer with a graphics program, clip-art and/or special fonts *(typefaces)*. You could also ask your members or talented friends to help.

Once you have a masthead, stick with it. It makes your newsletter easy to recognize and gives it consistency.

Art

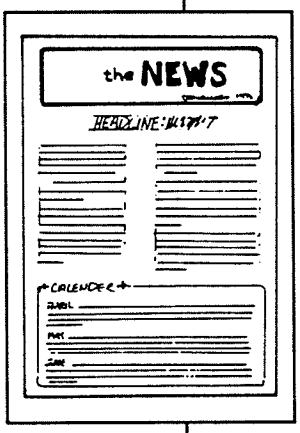


Simple artwork adds zip to your newsletter, but be sure it serves a purpose, such as illustrating a point. **Never use art just to fill up space.** The best locations for art are the left side of the page or the upper right-hand corner.

Draw simple illustrations or clip them from non-copyrighted material such as Extension bulletins or clip-art books. Photos may also be used, but check how well they copy before committing newsletter space to them.

Headlines

Design headlines and subheads *(secondary headlines within an article)* to lure your readers into the story. The headline should be a few words that sum up the story. Avoid using script or all capitals — both are difficult to read.



Color

Your text should always be in black or very dark-colored ink. You can add color to your newsletter by using colored paper stock or adding colored ink for art, rules *(lines)* or headlines. If you use colored paper, make sure there's enough contrast between the paper and the ink to allow easy reading. Color copying is eye-catching, but also more expensive than regular copying.

PUBLICATION

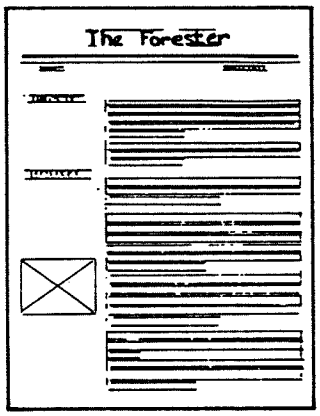
Once you have written your material, your only remaining problem is getting your readers to read it. Towards this end, your newsletter should be easy to recognize and easy to read. We'll discuss two possible formats here, but there are many others. Your goal is to have the audience read your message. **If the format is not easy to read — throw it out.**

A good format helps the audience read the articles.

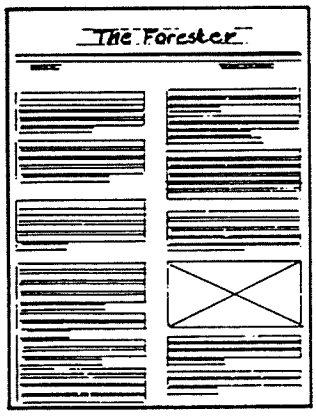
Paper that is 8½" x 11" commonly uses three formats: one column, two column and three column. Keep in mind that every sheet of paper has two sides, and that a single 11" x 17" sheet folded once equals four sides that are 8½" x 11".

ONE COLUMN:

Many experts report that the best way to put type on the page is in one column five to six inches wide, with headlines to the left and aligned at the top of the column. Readers can easily scan the headlines, and the white space keeps the page from seeming crowded. It's also easy to type the material to fit. One disadvantage: not as much fits on a page.



One Column



Two Column

TWO COLUMNS:

Many newsletters use two 3½" columns on a page because it's an easy format for editors to work with — easy to type, easy to use art with and easy to assemble. A lot of material can fit on a page. Plenty of space around headlines gives the pages an open, easy-to-read look. Be sure, though, to leave at least ½" margins and ½" between the columns.

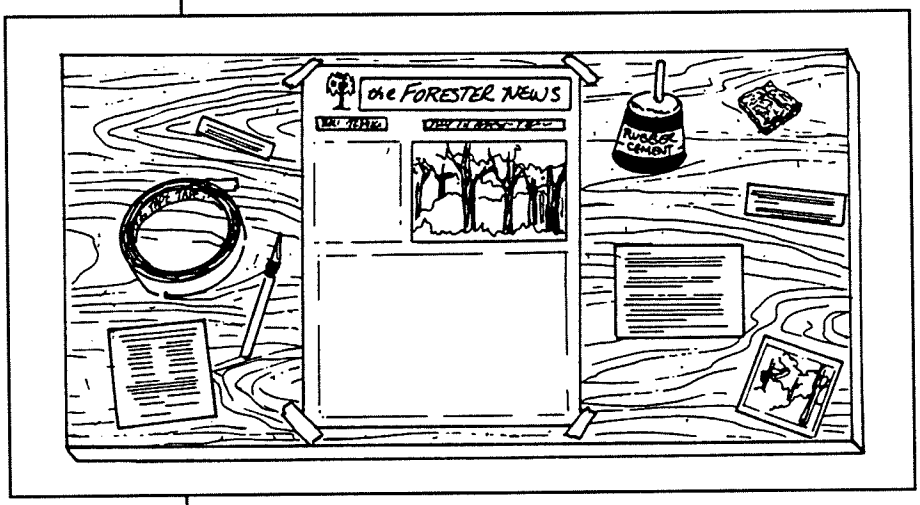
THREE COLUMNS:

With the increased use of computers, the three-column format has become more popular. The narrow columns are easy to read and simple to format on a computer. In addition, layout is very flexible: the lengths of columns and articles are adjustable.

Without a computer, however, a three-column format is somewhat difficult.

LAYOUT

You can do layout by the cut-and-paste method, in which you cut the articles and artwork to fit, and paste them in the proper places on the page. Useful tools for this are: an Exacto knife or razor blade, rubber cement *(or white glue)*, clear tape, a ruler and a repro blue pencil *(repro blue pencil lead doesn't photocopy)*.



You can also do layout on a computer. Many programs allow you to set up a newsletter and move elements around until you are satisfied, then print out a finished page. However, if you don't have the capability to scan photos and other art, you may still need to do a little cutting and pasting to get your final product.

Use boxes or rules *(lines)* to emphasize special sections of your newsletter. Don't overdo it, though, or you will have achieved clutter instead of emphasis.

Do's and Don'ts:

- **Do leave plenty of space around headlines to help them stand out.** Leave twice as much space between the headline and the text above it as between the headline and the text below it.
- **Do mix styles** – but with caution. It's okay to type one story in a different format to emphasize it, but if you jumble your newsletter with too many column widths, it is confusing to the readers.
- **Do number your pages.**
- **Don't end a column with a broken word.** Don't carry the last line of a paragraph to the top of the next column or the last line of a story to the next page. If you can't squeeze the material in, carry over two or three lines instead of just one.
- **Don't type in a single column more than 6½" wide.** Longer lines are okay for a short business letter, but never for a newsletter. Wide columns are hard to read.

There are many ways to reproduce your newsletter for publication: mimeograph, ditto, offset printing, etc. By far, the easiest for a CSA is photocopying. A copy shop will charge you five to ten cents per side to copy your newsletter, or you can do it yourself on their self-serve copy machines. Shop around for the best price, because they do vary. In addition, some of your members might be able to copy the newsletter for free or cheap, so be sure to ask them.

Community Supported Agriculture

...Making the Connection

Post Harvest Handling

Poor postharvest handling practices can cause extensive loss of market quality. Fresh produce is alive, and after harvest it depends upon its own food reserves for the energy needed to remain alive. Farmers need to manipulate postharvest conditions so that product deterioration is minimized and the quality delivered to the consumer is maximized. They can do this by providing favorable:

- Harvest practices
- Packaging
- Postharvest environment

Harvest Practices

Harvest at optimum maturity for best eating quality. **Immaturity** increases water loss and shrivel. Some fruits *(e.g., strawberries and tomatoes)* may never ripen satisfactorily; others *(melons, sweet corn)* may be low in sugars. **Overmature** products such as beans, corn, and celery become tough. Overmature sweet corn will be low in sugars and starchy. Both immature and overmature produce are more susceptible to decay.

Handle produce as little as possible to reduce injury to products.

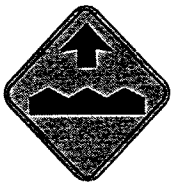
Harvest during the coolest part of the day. This is most important for highly perishable products, because high temperatures lead to rapid deterioration. To minimize the spread of certain diseases, harvest should begin as soon as the foliage has dried.

Handle all produce gently. Cuts, punctures, abrasions, crushing, and bruising happen in every handling step. Fruits and vegetables may appear undamaged, but internal bruising may have occurred. Most decay and much of the water loss *(shriveling)* develops on fruits or vegetables where damage has occurred. This can be reduced by eliminating as many steps as possible between harvesting and getting produce to your members.

Keep containers clean. Using water containing 70ppm chlorine *(or one teaspoon of household bleach mixed with one gallon of water)* will kill decay-causing organisms on the

container surface and will remove sand or other trash that could injure the produce. *(Plastic containers are easier to keep clean than wooden ones.)*

Keep harvested products out of the sun. This will minimize wilting, sunburn, and prevent unnecessary heating of produce. On a sunny, hot day, tomatoes held in the sun for one hour can be as much as 25°F hotter than fruit held in the shade. Find shade under trees, tall plants or trucks, or set up temporary shelter in the field with shade cloth, plywood or other material.



Avoid rough roads. Vibrations can cause considerable damage to produce. Grading field roads may be worthwhile. Tie or wedge the load securely to help reduce damage. Rug pads in pick-up beds also cushion produce.

PACKAGING

Don't overpack or underpack your containers. Packing too tightly causes compression bruises. If packed too loosely, the individual pieces vibrate against each other and sustain vibration bruises.

Use new or sterilized containers. Residue from old produce can infect new produce.

Make sure containers are not damaged. For instance, 80% of the stacking strength of fibreboard cartons is at the corners. If corners are damaged, much of the strength is lost. Carton strength is also reduced by bulge packing, wetting, and poor stacking in loads.

Containers need adequate ventilation to permit cooling and temperature maintenance.

POSTHARVEST ENVIRONMENT

The three important components of the storage environment are:

Temperature
Humidity
Ethylene gas

Temperature is the most important factor available for controlling product deterioration. Optimum temperatures increase shelf-life and help maintain quality *(see Handling Information table on following pages)*. Temperatures that are too high increase water loss and encourage decay.

Temperatures that are too low can cause chilling injury to sensitive products *(decay, discoloration, pitting, and loss of flavor and ripening ability)*. Cooling produce to storage temperatures as

soon as possible is critical to the shelf-life of produce, even once members get their shares home and in the refrigerator. To remove field heat, many products can be dunked in cool water.

Humidity is important because water loss from fresh produce causes wilting in leafy vegetables and shriveling in fruits, tubers, and roots. Sprinkling or misting some vegetables *(see Handling Information table on following pages)* with fresh water, trimming tops from root crops and shanks from corn, and using protective plastic packaging will help reduce water loss.

Though ethylene gas is helpful for ripening many commodities, it can also hasten unwanted ripening, cause loss of green in some immature products *(cucumbers, squash, snap beans)* and leafy vegetables, cause russet spotting on lettuce, bitterness in carrots, loss of leaves from cabbage, cauliflower and foliage of ornamentals, and shorten the shelf-life of cut flowers. Many crops produce significant amounts of ethylene gas. Some of the more common ones include apples, avocados, peaches, pears, plums, cantalopes, honeydew melons, and tomatoes. Don't store ethylene sensitive and ethylene producing products in the same room *(see the* **Display and Storage Information** *table for storage ideas)*.

Ethylene is more significant for long-term than short-term storage. When storing produce for only a day, farmers should concern themselves more with storing it at the correct temperature than with worrying about ethylene.

Two tables follow: The first gives general information for small, diversified growers; the second gives more specific information for those with larger operations.

Suggested Display and Storage Groups for Selected Vegetables

[Crops Within a Group are Compatible with Respect to Temperature, Humidity, and Ethylene Sensitivity or Production]

Group 1

Temperature = 32°F, Relative Humidity = 90-95%, Ethylene Sensitive or Low Ethylene Producing

Beets
Broccoli
Brussels Sprouts
Cabbage
Cabbage, Chinese
Carrots
Cauliflower
Celery
Chard, Swiss
Collards
Corn, sweet
Endive/Escarole
Kohlrabi
Lettuce, all types
Mustard/Turnip Greens
Onions, green
Parsley
Peas, all types
Radishes
Rutabagas
Spinach, all types
Strawberries
Turnips
Sliced Watermelons

Group 2

Temperature = 50°F, Relative Humidity = 90-90%, Chilling and Ethylene Sensitive Crops

Beans, all types
Cucumbers
Eggplants
Okra
Peppers
Yellow Squash
Zucchini Squash

Group 3

Temperature = 50°F, Relative Humidity = 90-95%, Chilling Sensitive Crops that Produce Ethylene

Green Tomatoes, mature *
Honeydew Melons
Irish Potatoes
Muskmelons
Sweet Potatoes
Tomatoes, ripe

Group 4

Temperature = 70°F, Relative Humidity = 60-80%, Crops Tolerant to Higher Temperatures and Lower Humidities

Acorn/Butternut Squash
Onions, dry
Pumpkins
Watermelons

* Mature green tomatoes will ripen faster when exposed to ethylene from ripe tomatoes. For longer storage, keep with Group 4, but keep humid by covering lugs with wet burlap.

Community Supported Agriculture

HANDLING INFORMATION FOR VEGETABLES

CROP	*RELATIVE PERISHABILITY	OPTIMUM STORAGE CONDITIONS TEMP (°F)	HUMIDITY (%)	**CHILLING SENSITIVE	COMMENTS
Beans, lima	M	40 to 45	95	Yes	Sprinkle lightly
Beans, pole & snap	H	38 to 42	95+	Yes	Sprinkle lightly
Beets	M	32	98 to 100	No	Sprinkle lightly; remove tops
Broccoli	VH	32	95+	No	Sprinkle lightly
Brussels sprouts	H	32	95+	No	Sprinkle lightly
Cabbage	M	32	95+	No	Sprinkle lightly
Cantalopes	M	38 to 41	95+	Yes	
Carrots	M	32	95+	No	Sprinkle lightly; remove tops; ethylene exposure may cause bitterness
Cauliflower	VH	32	95+	No	Sprinkle lightly
Celery	VH	32	95+	No	Sprinkle lightly
Chard & Collards	H	32	95+	No	Sprinkle lightly
Corn, sweet	VH	32	95+	No	Sprinkle or top ice
Cucumbers	H	50 to 55	95+	Yes	
Eggplants	H	50 to 55	95+	No	Sprinkle lightly
Endive & Escarole	VH	32	95+	No	Sprinkle lightly
Honeydew melons	M	45 to 50	95+	Yes	
Lettuce	VH	32	95+	No	Sprinkle lightly; ethylene exposure may cause russet spotting
Mustard & Turnip Greens	H	32	95+	No	Sprinkle lightly
Onions, dry	L	32	65 to 70	No	
Onions, green	VH	32	95+	No	Sprinkle lightly
Parsley	VH	32	95+	No	Sprinkle lightly

HANDLING INFORMATION FOR VEGETABLES *(CONTINUED)*

CROP	*RELATIVE PERISHABILITY	OPTIMUM STORAGE CONDITIONS TEMP (°F)	OPTIMUM STORAGE CONDITIONS HUMIDITY (%)	**CHILLING SENSITIVE	COMMENTS
Peas, English	VH	32	95+	No	Sprinkle lightly
Peas, Snow/ Chinese	VH	32	95+	No	Sprinkle lightly
Peppers, green	H	50	95+	Yes	
Potatoes, Irish	M	55 to 70	90	Yes	If washed, dry thoroughly
Potatoes, sweet	L	55	90	Yes	All open surfaces should be well healed
Pumpkins	L	50 to 60	60	Yes	
Radishes	L	32	95+	No	Remove tops; sprinkle lightly
Rutabagas	L	32	95+	No	Remove tops; sprinkle lightly
Spinach	VH	32	95+	No	Sprinkle lightly
Squash, yellow and zucchini	H	50	95+	Yes	
Squash, acorn	L	50 to 60	60	Yes	Trim close, allow to heal
Squash, butternut	L	50 to 60	60	Yes	Trim close, allow to heal
Strawberries	VH	32	95+	No	
Tomatoes, green	H	70	95+	Yes	
Tomatoes, ripe	VH	50 to 70	95+	Yes	Avoid storage below 50°F
Turnips	M	32	95+	No	Remove tops; sprinkle lightly
Watermelons, whole	L	>55	80 to 90	Yes	Trim stems close to fruit and allow to heal
Watermelons, sliced	H	32	95+		

* Relative perishability under good storage conditions: **L=Low; M=Moderate; H=High; VH=Very High.**

** Chilling sensitive crops should not be stored below their optimum temperature.

Adapted from: ***Family Farm Series.*** *Marketing for the Small Farmer: Direct Marketing and Quality Control.*

Community Supported Agriculture

Presentations

Presentations let people meet you and learn about your farm.

An effective presentation requires planning. Consider the following:

- **Who is your audience?** If you know something about your audience, you will be better able to plan a presentation that speaks directly to them.
- **When will you speak?** You may make some changes in your delivery if you know you will be appearing at the end of a long line of speakers or after a meal when the audience is sleepy.
- **Where will you speak?** Try to pick a comfortable setting which is the right size for the number of people you expect.
- **How will you present your material?** Will you use visuals? A microphone? *(Tip: Avoid using a microphone or darkening the room for slides if the audience consists of less than 40 people.)*

Most presentations are made up of three parts:

① the Introduction

② the Body

③ the Conclusion

The **introduction**, which uses one-quarter of the presentation time, should capture the audience's attention and tell them what you are going to say. It should lead gracefully into the body of the presentation.

The **body** of your presentation contains your real message, and lasts about five-eighths of your time. To organize your thoughts, jot down what you would like to say, then group the ideas together. Put the groups of ideas in a logical order. Practice talking through your presentation, to hear if you should rearrange your ideas, if you need to cut out material, or if it fits the time limit.

The **conclusion**, the remaining one-eighth of your time, should emphasize your main points in a brief summary and then wrap up your thoughts. Many speakers like to end with a quote or a funny story that sticks in the audience's minds.

When you've organized all your thoughts, practice your speech. It is best not to memorize or write your presentation word for word, but you may want to note certain statements or phrases that you don't want to forget. When you have a firm idea of what you will say, put some polish on your presentation by following these suggestions:

If you relax and enjoy your presentation, so will your audience.

- **Speak to your audience.** Look at them, respond to them.
- **Don't worry about what to do with your hands.** Use them naturally.
- **Watch your posture.**
- **Make sure you are being heard,** even in the back of the room.
- **Speak clearly and distinctly,** and try not to go too fast.
- **Stick to your time limit,** or cut it even shorter.
- **Group your visuals together,** so that you use them all in one part of your presentation.

If you are using slides, make sure they are clear and in focus. Check out all the equipment before you start, making sure that you can advance the slides, that the screen works, and that the bulb isn't burned out *(keep a spare new bulb with your equipment)*. In addition, run through all the slides in the carousel to check that they are positioned correctly.

Finally, to remember something, people need to hear it several times. An organized delivery helps them remember, too. At the beginning, tell your audience what the presentation is about. At the end, tell them what they heard. In between, repeat and emphasize your main points. Most importantly, relax and enjoy the presentation, and your audience will, too.

COOPERATIVE EXTENSION • UNIVERSITY OF CALIFORNIA

Family Farm Series

Small Farm Center, University of California, Davis, CA 95616

SMALL-SCALE COLD ROOMS FOR PERISHABLE COMMODITIES

The authors are James F. Thompson, Extension Specialist, Cooperative Extension, and Mark Spinoglio, Graduate Student, Biological & Agricultural Engineering Department, U.C. Davis

Temperature management is the key to maintaining the freshness of fruits, vegetables, and cut flowers after they are harvested. By investing in a cold room, small-scale farmers, packers, or merchants can significantly improve the quality of their produce. This publication describes the choices producers have in buying or building cold storage facilities.

Planning

The cold room should be conveniently located. If its purpose is to hold produce after harvest and before delivery to a wholesaler or retailer, it should be easily accessible from the field. Time lost between harvest and initial cooling can seriously reduce quality. For many commodities, 1 hour at a field temperature of 90° F will reduce quality as much as 10 to 20 hours in storage under proper temperature conditions.

If the cold room is to be used in conjunction with a retail outlet, locate it so produce can be easily moved out from cold storage for sale, as products are sold, and easily returned at the end of the day. In addition, locate the cold room at a site with good drainage and access to utilities. Also, locate and design it so that it can be expanded as your business grows.

Size of a Cold Room

Cold room size is based on the typical volume of produce (measured in ft^3) you would handle from a peak harvest or from a peak sales day. Obtain the storage area needed by dividing the produce volume by the height that produce can be stacked. Shelves can be used to increase the effective stacking height of some products. Add to the storage area enough room for a 6-inch distance between product interior walls to allow for good air circulation and space for aisles. The aisle width is based on the size of the cold room. For small walk-in cold rooms the aisle is a minimum of 3 feet wide. A larger cold room which utilizes pallets for product handling will have a minimum aisle width of 6 feet. Also, to guarantee good air flow, the cold room should be at least 12 to 18 inches higher than the produce, figure 1. If the cold room is used for initial cooling and you are not using forced-air cooling, allow extra room so that the product can be

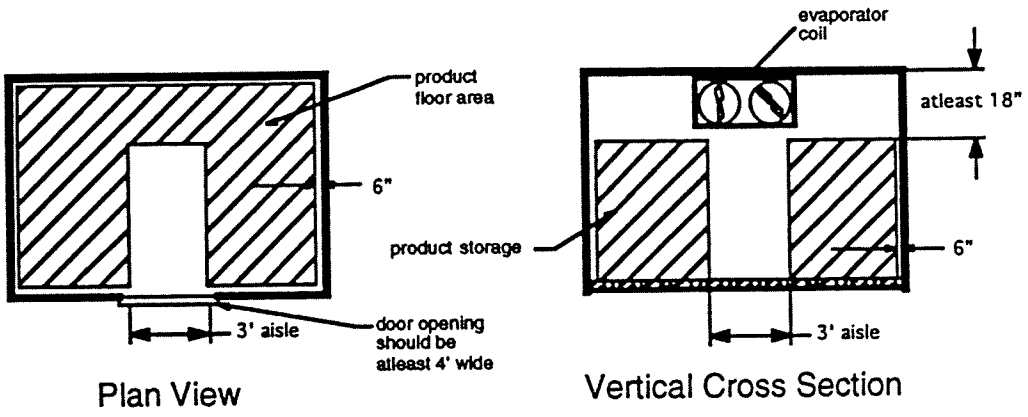


Figure 1. Product placement in smaller cold rooms (about 10' x 12').

spread out for good exposure to cold air. After cooling, the product can be tightly stacked for storage.

Cold rooms can be purchased new or used as prefabricated units, can be operator-built, or made from used refrigerated transportation equipment, such as railcars, marine containers, or highway vans. What you choose should be based on what you can afford, availability of equipment in your area, and the amount of time you can invest in building a structure or modifying transport equipment.

THE CHOICES

Table 1 shows cost estimates for various cold room operations. Evaluated on a per square foot basis, a commercially installed cold room is one of the most expensive choices. Building the cold room yourself is the least expensive, but cost is based only on the cost of materials and does not include the cost of time for planning and construction. Costs of commercially installed cold rooms are significantly affected by the size of the cold room. For example, a small room, 6 x 8 feet, costs about $\$160/ft^2$. A 20 x 20-foot room, which has about as much area as one of the highway vans, costs $\$45/ft^2$. Highway vans are more expensive than a cold room you construct.

Prefabricated cold rooms

Prefabricated cold rooms are most often bought used from restaurants or stores going out of business or remodeling and from companies that handle used units. The cold room walls are usually assembled in sections. This makes disassembling and assembling to add space or to be sold easier. The sections or panels normally consist of polystyrene insulation covered on either side with metal or plastic. The panels use special attachment systems to allow quick installation. Most prefabricated coolers must be assembled within an existing structure.

Railcars

Railroad companies, reducing their inventory of refrigerated railcars, offer them occasionally to the public for purchase. These cars are very sturdy and were originally well insulated. Refrigeration is run by a 440V, 3-phase electric motor which is, in turn, powered by a diesel engine generator. The generator set can be salvaged and the refrigeration connected to the farmer's electric utility (providing there is 440V, 3-phase power available). Cars have 9-foot, 4-inch-high ceilings, which limit the height that produce can be stacked. Doors on a railcar are located in the center of the side walls, allowing easier access to the product

Table 1. Cost comparison of small-scale cold room choices.

Type of cold room	Equipment materials ($/ft^2)	Modification and transportation to site ($/ft^2)	Total ($/ft^2)
Prefabricated buildings			
Commercially installed (new) *	-	-	45
Commercially installed (used) *	-	-	10-30
Self-constructed°	15	-	15
Used refrigerated transport vehicles			
Railcars«	6	22-27	28-33
Highway or piggyback trailers†	33-45	0	33-45
Marine containers¶	30-33	5-10	35-43

*Prefabricated panels with metal interior and exterior sides attached to an insulation board. Building assembled by a commercial contractor, 400 ft^2 of floor area, 2 hp refrigeration system (add 5 percent if installed outside).

°Wood-frame construction, fabricated with exterior grade plywood interior and exterior surfaces. Installed by grower. Cost includes a contractor-installed used refrigeration system.

«Diesel/electric refrigeration system. Diesel generator set can be salvaged. Floor dimensions of a car are 9 x 50 feet.

†Diesel powered. Cost of converting to electrically powered refrigeration is $10 to $20/$ft^2$. If wheels, axles, and suspension assembly are left attached, a truck-bed high dock and loading ramp must be constructed at additional cost.

¶Electrically powered, no wheels, axles or suspension system attached. Can be purchased in 20-, 24-, and 40-foot lengths.

compared with marine containers and highway vans, which usually have doors at the end of the unit. The most significant problem that most purchasers have is getting the car from the railroad to the farm site. The car without the trucks is usually lifted by a crane to a flatbed truck for transport to the farm. Another crane is needed at the installation site to place the car. It is possible to devise a method for putting dollies in place of the railcar trucks and hauling the car over the road.

Highway vans

Used refrigerated highway vans, as cold rooms (fig. 2), have one unique advantage: The "cold room" can be portable if the wheels are left on the van. If you change production sites, the cold room can easily be transported to a new location. The refrigeration system is powered directly with a diesel engine, a benefit if utility electricity is not available at the cold room site. Although, engine driven units are often noisy and may disturb neighbors.

Figure 2. A used highway van as a cold room.

In some areas, it may be less expensive to operate the refrigeration if it is converted to run with an electric motor, but converting is expensive and the cost must be added to the project.

Highway vans and other refrigerated transit vehicles are limited to 3 foot aisles due to their long rectangular shape. To remove the product from the back of these cold rooms an aisle is needed along the length of the cold room, figure 3. This aisle can remove up to 45 percent of the usable floor area.

Because highway vans are built light to maximize the load weight they can carry, used vans are often in poor condition. Insulation, limited to begin with, has deteriorated, door seals are poor, and other damage has occurred that permits too much air leakage. Vans in poor condition are less expensive to purchase, but do not provide adequate cold storage and are more costly to operate in the long run. Carefully inspect a used trailer before buying it. See figure 4 for details to consider.

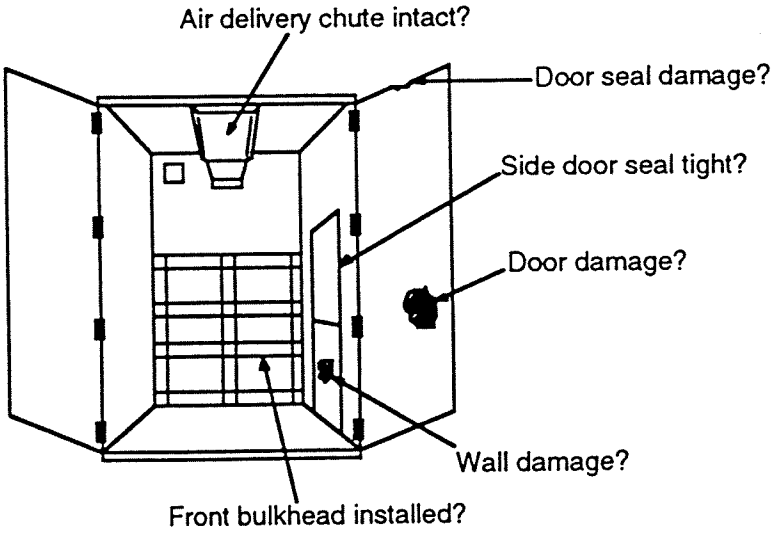


Figure 4. Factors to consider when inspecting a used trailer for purchase as a small cold room.

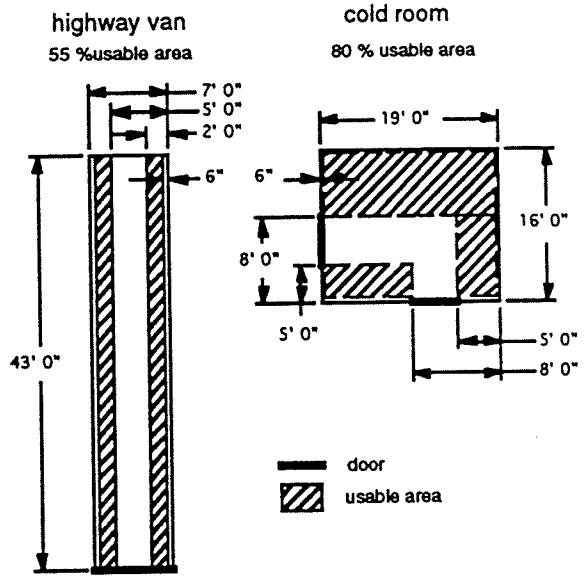


Figure 3. Usable floor area for transit vehicles and a 300 ft^2 commercially or self-built cold room.

The floor of a highway van is usually about 4 feet above the ground; this can cause difficulty in moving products in and out of the van.

Marine containers

These are available in 20-, 24-, and 40-foot lengths. Their built-in refrigeration units are powered with 220V or 440V, 3-phase electricity and they can be plugged directly into utility power. They are usually well built, and have deep t-beam floors and good fan capacity that offers good air circulation. In fact, the air circulation can provide adequate room cooling.

A disadvantage of all transport vehicles is that their refrigeration systems are usually not designed to produce a high relative humidity. Low humidity will cause products to dry out, resulting in weight loss and poor quality. This, particularly, is a problem if the cold room is going to be used for long-term storage. The one way to reduce drying is to keep the floor and walls wet, but this will increase corrosion, reduce equipment life, and increase the need for defrosting.

Product can also be packed in plastic bags or box liners to reduce moisture loss.

Self-built cold rooms

For many producers, a self-built cold room (fig. 5) is the least expensive option. Figures 9a and 9b provide all the basic details for constructing a small cold room. Framing is 2 X 6-inch structural lumber, 24 inches on center with exterior grade plywood covering on the inside and outside. The sole plate (mudsill) and if possible the wall guard should be pressure treated to resist decay due to moisture. The 2 X 6-inch framing allows the use of R-19 fiberglass insulation, which is recommended over the thinner R-11 fiberglass insulation used with 2 X 4-inch walls. Other types of insulation with higher levels of insulation per inch than fiberglass (such as expanded polystyrene or urethane foam) can be used, but they usually cost more than fiberglass for the same amount of R-value.

A vapor barrier must be installed on the warm side of the insulation. Without a vapor barrier, water will condense on the insulation, which reduces the insulation's effectiveness and may allow dry rot in the studs and joists (fig. 6). A 4- to 6-mil thick polyethylene sheet is a good vapor barrier. The vapor barrier should be installed after the wall and ceiling are framed and prior to installing the exterior plywood covering. Joints should be overlapped at least 12-inches and taped. Staple the vapor barrier to the studs and joists to keep it in place during construction. To create a seal at the base of the wall, silicon should be applied between the vapor barrier and the sole plate metal shield.

A foundation is not necessary for cold rooms built in existing structures and on existing concrete slabs. When a foundation is built heat gain across the foundation should be considered. A rigid insulation is an option and can be applied to the perimeter of the foundation. A 2-inch foam board floor insulation may be used for cold rooms kept at temperatures above

Figure 5. Commercially installed used cold storage facility.

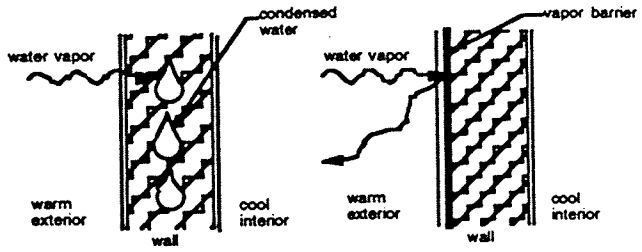


Figure 6. Vapor barrier diagram.

32 °F. The foam board and perimeter insulation are a requirement for cold rooms kept at temperatures below 32 °F. The soil must be protected from freezing temperatures. If the soil freezes it will expand and cause the concrete slab to crack. A vapor barrier is necessary between the concrete slab and soil. The concrete allows moisture through, in the same manner as the walls, and therefore, requires a vapor barrier.

A non insulated, framed, existing structure with a few modifications can be converted to a cold room. A polyethylene vapor barrier needs to be applied to the interior side of the framing to reduce the vapor penetration discussed previously. A 2-, 3-, or 4-inch polystyrene board should be installed against the interior side of the vapor barrier. The thicker the polystyrene board, the greater the wall thermal resistance. The polystyrene cannot be installed on a structure which has existing insulation, due to possible condensation problems caused by the temperature gradient across the wall. An optional 3/8-inch exterior grade plywood can be installed against the polystyrene to protect it from damage. Seals need to be added to all doors to decrease air losses. Most importantly, all locks on the doors must be removed for safety purposes.

Figure 9b shows two types of doors that can be used. Small cold rooms like these permit a great amount of warm air to enter when a door is opened, increasing energy use and, more importantly, allowing the temperature to rise in the room. Infiltration can be significantly reduced by installing plastic or canvas flap doors just inside the wood door. The door width will vary depending on the producer's needs. If the product is handled on pallets then the door width must be at least 54-inches. Keep in mind, the larger the door the greater the infiltration.

A 3/4-horsepower refrigeration system will generally be adequate for a 100-square foot cold room. Figure 8 provides estimated refrigeration capacity for larger cold rooms. Most cold room sites in California fit within the two climates shown, central valley and coastal. Choose the climate most similar to your proposed cold room site. Determine the optimum size for your cold room, based on floor square feet. Then by knowing your products optimum storage temperature, explained in the following paragraphs, you can approximate the refrigeration capacity need for your cold room. The "tons of refrigeration" allows you to approximate the refrigeration unit's cost. The more tons of refrigeration required the higher the unit cost. The cold room design and operation specifications used to develop figure 8 are footnoted. More capacity would be needed for rapid cooling methods like forced-air cooling.

Products have various optimum temperature requirements. Depending on the product or products being stored and their stage of maturity at time of storage, an optimum operating temperature can be determined. Table 2 lists optimum temperatures for short-term storage of many types of perishable products. A producer that must handle products with very different optimum storage temperatures may require separate cold rooms. If product temperature requirements are not very different, then careful temperature and product management may allow a common cold room to be used.

Higher humidity can be maintained in a cold room if the evaporator coil is oversized. This allows the coil to operate at a relatively high temperature, thereby reducing the amount of condensation on the coil and increasing humidity in the room. This also helps reduce frost build up on the coil. Coils should have a warm water or electric defrost system. If you select a

warm water defrost system, provide a system for draining defrost water outside the cold room. Wood construction will not last long if the wood is wetted frequently and insulation loses its resistance to heat flow if it is wet.

Refrigeration systems must be controlled with an accurate thermostat placed away from the door. Check the thermostat's calibration by placing a remote reading thermometer in the cold room. Install the dial in a convenient location on the outside of the room. Calibrate the thermometer with an ice bath (a stirred mixture of ice and water has a temperature of 32.5°F) and check the thermometer regularly to see that the thermostat is maintaining a proper temperature.

If the cold room is going to be kept above 50-55 °F, it may be possible to use a room air conditioner instead of a packaged refrigeration unit. Air conditioners will build up ice on the cold evaporator coil if they are operated at temperatures below this range. An air conditioner would probably cost about half as much as an equivalently sized refrigeration unit.

Evaporative cooling can also be used as a substitute for mechanical refrigeration. It will produce air temperatures equal to 2° to 3°F above the wet bulb temperature of the outside air. In the summer in California 65° to 75°F air temperatures can be dependably achieved. Coolers can be purchased as packaged units or self-built from parts available at most hardware stores, figure 7. A self-built cooler requires a pump capacity of 1/3 gallon/min. of water per foot of pad length. The reservoir should have the holding capacity for the pump capacity plus an extra gallon/min. of water per pad linear foot. To achieve the previously stated air temperatures, at least 1 square foot of pad area should be provided for each 150 cubic feet per minute (CFM) of air moved by the fan. The fan capacity is determined by computing the cold room volume. The fan should have the capacity of 0.5 air changes a minute, half the cold room volume. This is the total fan capacity in cubic feet per minute at 1/8 inch static water pressure.

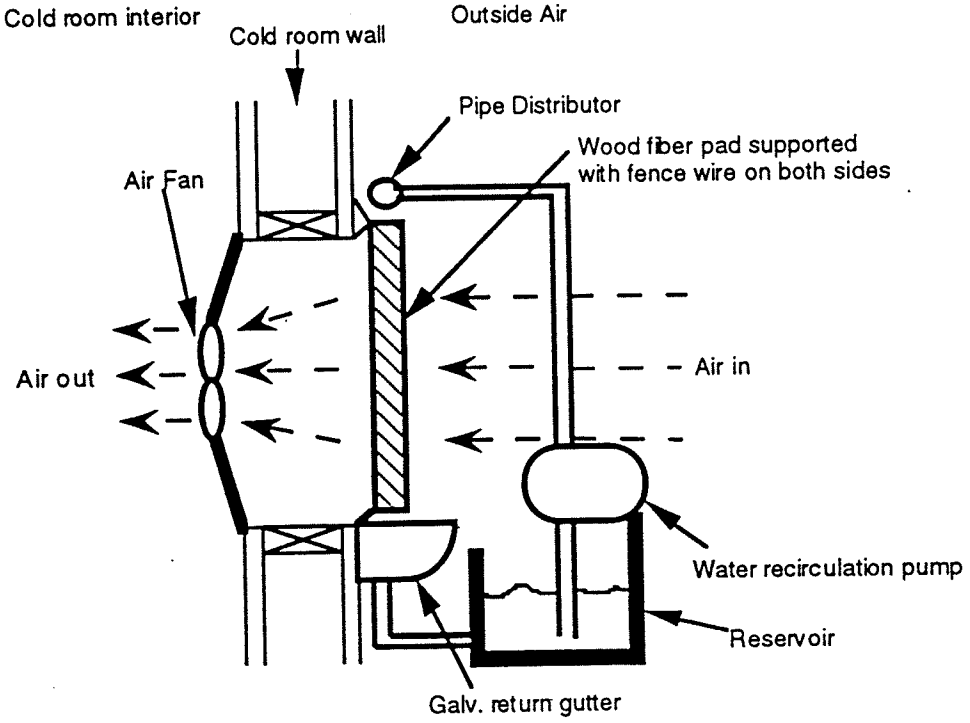
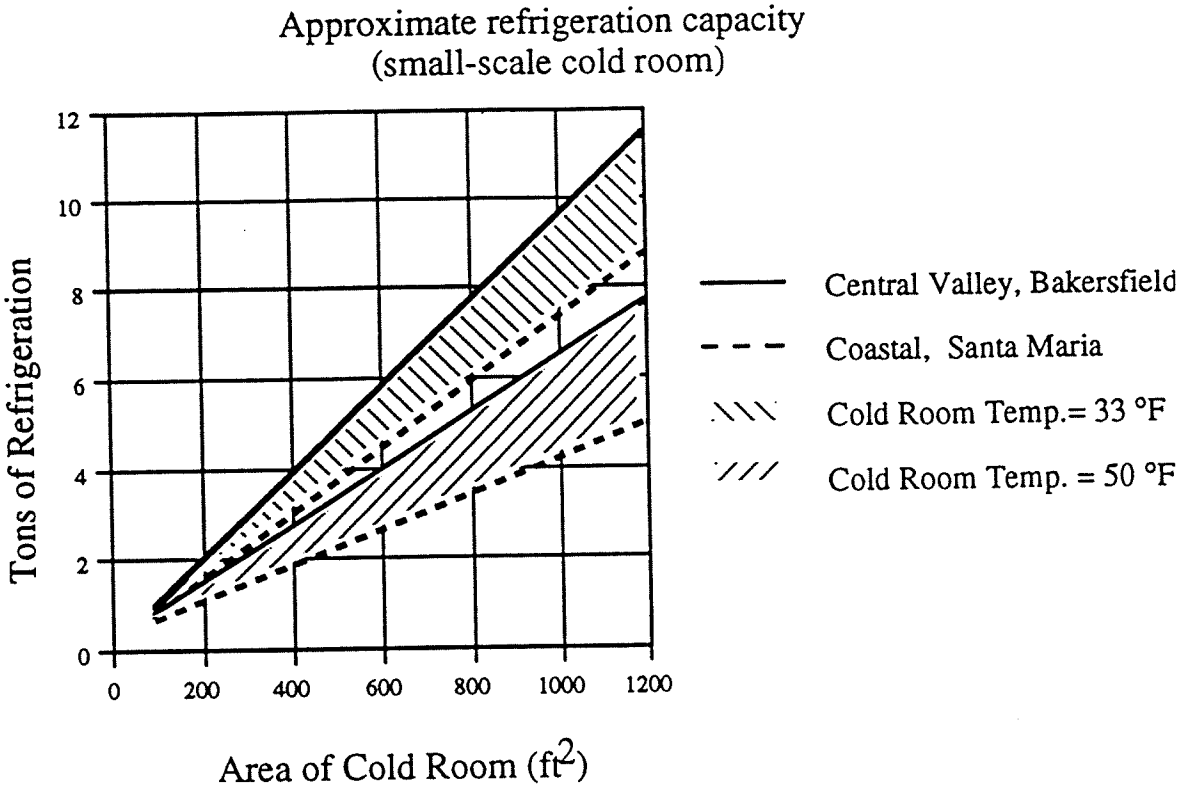


Figure 7. Evaporative cooling unit components.



Design/Operation Criteria:
- Ambient conditions:
  - Bakersfield (June) temperature = 100 °F. *
  - Santa Maria (Sept.) temperature = 75 °F. *
- Product heat loss based on Peaches (C_p=0.91 Btu/(Lb-°F))
- Constant cold room height of 10 ft. (7 ft. stackable height)
- 50 percent product turnover in 24 hours.
- Product density = 25 Lb/0.5 bu.
- 33 °F cold room:
  - Removed 40 °F of product field heat. (Central Valley) **
  - Removed 30 °F of product field heat. (Coastal) **
- 50 °F cold room:
  - Removed 25 °F of product field heat. (Central Valley) **
  - Removed 15 °F of product field heat. (Coastal) **

* Based on "Normal Daily Maximum".
** Over a 24 hour time period.

Figure 8. Approximate refrigeration capacity for small-scale cold rooms.

Example calculation of refrigeration sizing for a small cold room:

Required Information:
The cold room is going to be located in Yolo County (central valley). This cold room will store pears at 33 °F in boxes stacked seven high. The box dimensions are 11" deep, 11.375" wide, and 18.5" long. The turnover rate is estimated at 581 boxes every 24 hours. Therefore, the cold room holds a maximum of 1162 boxes and 50 % are taken out each day and replaced. Figure 8 is based on a 24 hour 50 percent turnover rate, therefore, all estimates need to be based on 24 hours.

Cold Room Size:

$$\text{Total Number of Boxes} = \frac{(581 \text{ boxes})}{(0.5 \text{ turnover})} = 1162 \text{ boxes}$$

$$\text{Usable Area} = \frac{(1162 \text{ boxes}) \times (11.375" \times 18.5")}{(7 \text{ boxes high})} = 34900 \text{ in}^2 = 242 \text{ ft}^2$$

Assuming 80 percent of the floor area is usable for box storage.

$$\text{Total Area of Cold Room} = \frac{(242 \text{ ft}^2)}{(0.80)} = 302.5 \text{ ft}^2$$

**The cold room size should be 16' by 19' with a loading door and an unloading door as shown in figure 3.

Refrigeration Load:

**The cold room is 300 ft^2 and is located in the central valley. The room temperature will be kept at about 33 °F. From figure 8 an approximated refrigeration capacity of 3 tons is required.

Example calculation of fan size, pad area, and water recirculation requirement for an evaporative cooler:

Required Information:
The cold room is located in Yolo County (ambient temp. of 100 °F, relative humidity of 30 %). The desired room temperature is about 75 °F. The cold room size is 300 ft^2 with a ceiling height of 10 feet, figure 3.

Fan Capacity:

Volume of Cold Room = (300 ft^2) x (10 ft) = 3000 ft^3

Fan Capacity = (3000 ft^3) x (0.5 air changes per minute) = 1500 CFM

**The fan capacity should be equal to 1500 cubic feet per minute.

Pad Area:

$$\text{Pad Area} = \frac{(1500 \text{ ft}^3)}{(150 \text{ CFM/ft}^2 \text{ of pad})} = 10.0 \text{ ft}^2$$

**A 3.25 ft by 3.25 ft pad will meet the required 10 ft^2 area.

Water Recirculation Requirement:

Gallons = (3.25 ft pad length) x (1/3 gal./min./ pad length) = 1.1 gal./min.

Reservoir = 1.1 gal./min. + (1 gal./min.) x (3.25 ft pad length) = 4.4 gal./min.

**Reservoir should supply about 4.5 gallons of water.

Table 2. Optimum storage temperature for various products.

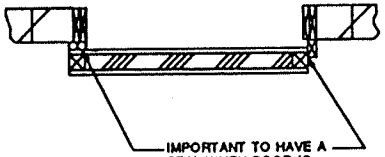
Temperature after cooling or for short-term storage	Fruits	Vegetables	Flowers
0°C (32°F) or below (but above freezing point)	Apples*, apricots, most berries (except cranberries), cherries, dates, figs, grapes, kiwifruit, loquats, nectarines, peaches, pears, persimmons, plums, prunes, quinces	Artichokes, asparagus, beans, beets, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celeriac, celery, chard, chicory, collards, corn, endive, escarole, garlic, leafy, greens, horseradish, kale, kohlrabi, leeks, lettuce, mushrooms, onions, parsley, parsnips, green peas, radishes, rutabagas, salsify, spinach, turnips, watercress	Carnation, chrysanthemum, iris, lily-of-the-valley, dry rose, sweetpea, tulip
0°-2°C (32°-35°F)	Apples*, oranges	Asparagus, fullslip cantaloupe, southern peas, summer squash, tamarillos	Allium, aster, bouvardia, crocus, freesia, gardenia, gerbera, hyacinth, narcissus, cymbidium orchid, ranunculus, rose in preservative
2°-7°C (35°-45°F)	Apples*, avocados (ripe), cranberries, guavas, oranges, pomegranates, tangerines, mandarins	Cucumbers, eggplant, muskmelons (casaba, crenshaw, honeydew), watermelon, okra, sweet peppers, pumpkins, winter squash, summer squash, taro, ripe tomatoes	Acacia, alstromeria, anemone, aster, bird-of-paradise, buddleia, calendula, calla, candytuft, columbine, cornflower, dahlia, daisy, delphinium, gerbera, gladiolus, gypsophilia, heather, lily, lupine, marigolds, cymbidium orchid, poppy, phlox, primrose, protea, snapdragon, statice, stephanotis, stock, strawflower, sweet william, violet, zinnia, florists' greens
7°-13°C (45°-55°F)	Avocados, carambolas, lemons, limes, papayas, passion fruit, pineapples	Cucumbers, eggplant, muskmelons (casaba, crenshaw, honeydew), watermelon, okra, sweet peppers, pumpkins, winter squash, summer squash, taro, ripe tomatoes	Bird-of-paradise, heliconia, cattleya orchid, sweet william
13°C (55°F) and above	Bananas, grapefruit, mango, plantain	Ginger, jicama, watermelon, sweet potatoes, green tomatoes	Anthurium, ginger, vanda orchid, poinsettia

*Apple cultivars vary in their susceptibility to chilling injury.

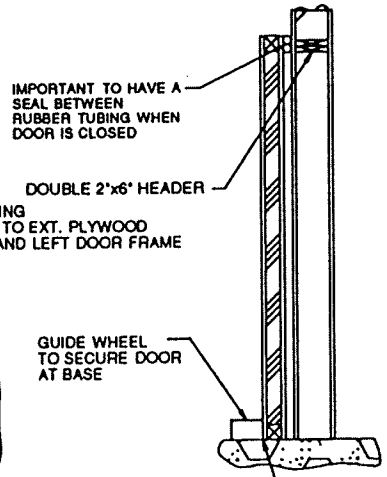
DOOR DESIGN OPTIONS

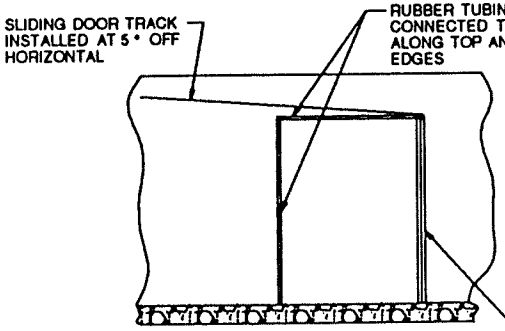
OPTION # 1
SLIDING DOOR

HORIZONTAL CROSS-SECTION OF DOOR WALL INTERFACE

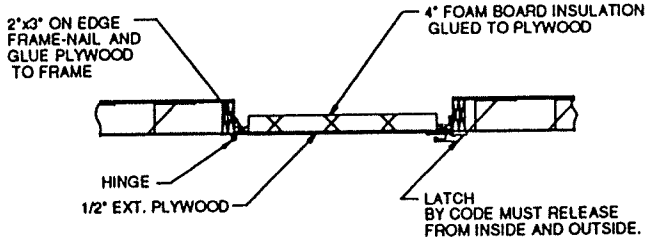


VERTICAL CROSS-SECTION OF DOOR WALL INTERFACE





OPTION #2
HINGED DOOR

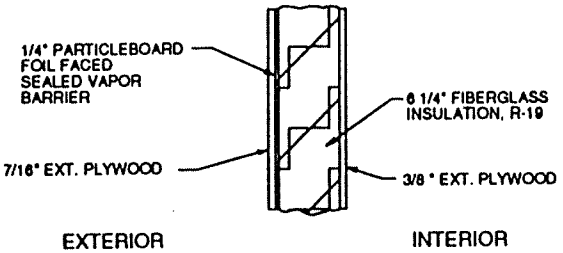


NOTES

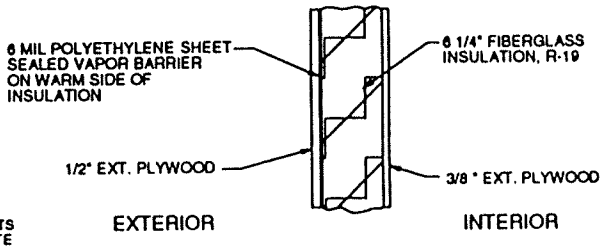
- EXTERIOR WALLS AND CEILING, WHITE, LATEX, NONGLOSSY PAINT.
- INTERIOR WALLS AND CEILING, WHITE, LATEX, NONGLOSSY PAINT.
- ANCHOR BOLTS: 1/2" DIA. DRILLED IN EXPANSION BOLTS.
- ANCHOR BOLTS MINIMUM CONCRETE PENETRATION OF 4".
- SUGGEST DOOR PLASTIC FLAPS FOR ENERGY CONSERVATION.

WALL/CEILING ENVELOPE DESIGN OPTIONS

OPTION # 1
FOIL FACED PARTICLE BOARD



OPTION # 2
PLYWOOD POLYETHYLENE COMBINATION

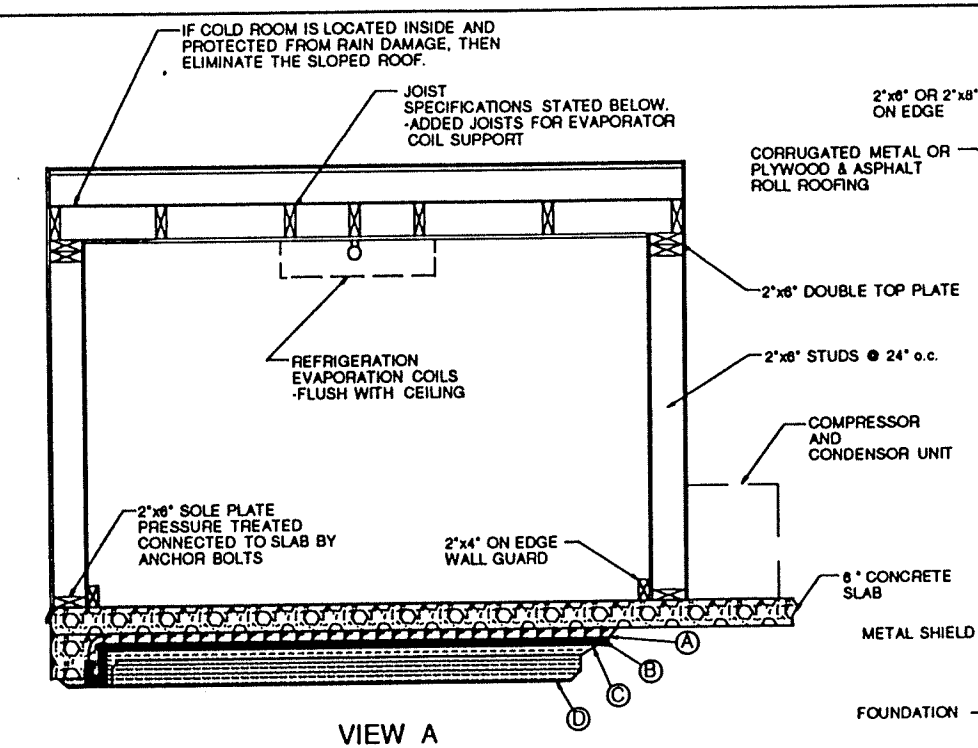


VAPOR BARRIER NOTES

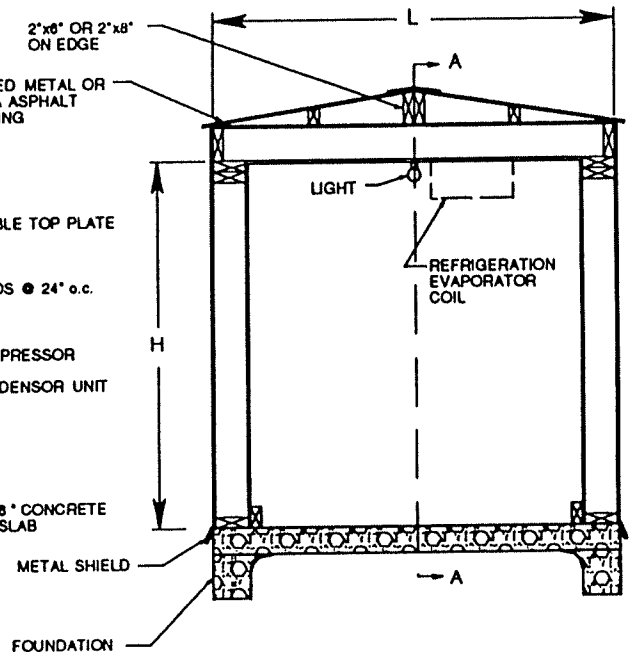
- OVERLAP POLYETHYLENE SHEET 12 INCHES.
- TAPE SEAMS AND ANY OTHER VAPOR PENETRATRATION LOCATIONS WITH TAPE.
- SILICON ALL VAPER BARRIER TO SOLE PLATE METAL SHIELD CONNECTIONS

COOPERATIVE EXTENSION SERVICE AGRICULTURAL COLD STORAGE FACILITY	
Drawn by: Mark Spinoglio	
Scale: None	Units: None
Date: March 10, 1994	Figure 9a

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION/PLACER COUNTY
11477 E AVENUE, AUBURN, CALIFORNIA 95603 (916) 889-7385 • FAX (916) 889-7397



VIEW A



CONCRETE SLAB DETAILS

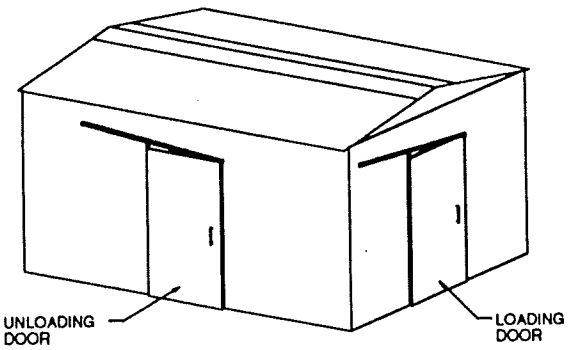
A - OPTIONAL
- 2" FOAM BOARD INSULATION.
- 25 psi COMPRESSION STRENGTH.

B - 6 MIL POLYTHYLENE, VAPOR BARRIER.

C - 2" SAND LAYER.

D - 4" GRAVEL LAYER.

- FOUNDATION IS NECESSARY FOR LARGER UNITS.



JOIST SPECIFICATIONS

L	JOIST
L<10	2"x6" @ 24" o.c.
10'<L<14'	2"x8" @ 24" o.c.
14'<L<16'	2"x8" @ 16" o.c.

H=10' MINIMUM

- LATERAL BRACING AT MIDPOINT OF JOIST.
- STRUCTURAL LUMBER
- SPECIFICATIONS MAY VARY WITH LOCATION.
- SNOW LOADING IS NOT CONSIDERED.
- FOR COLD ROOM WIDTHS GREATER THAN 16' CONSULT AN ENGINEER.
- FOR EVAPORATOR COIL SUPPORT CHANGES TO JOIST SIZE OR SPACING MAY BE NECESSARY.

COOPERATIVE EXTENSION SERVICE AGRICULTURAL COLD STORAGE FACILITY	
Drawn by: Mark Spinoglio	
Scale: None	Units: None
Date: March 10, 1994	Figure 9b

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION/PLACER COUNTY
11477 E AVENUE, AUBURN, CALIFORNIA 95603 (916) 889-7385 • FAX (916) 889-7397

Surveys

A survey of your members takes a little more effort, but involves them more in their food supply. It doesn't have to be long. It should get members' thoughts on the size of the share, the selection of items, the quality, and anything else you would like to know about the CSA. For example, if you hosted a harvest day, you might want to ask for feedback about it.

Try to get as many surveys returned as possible. You can collect them where members pick up their shares, or have them mailed in. The more surveys you get back, the greater the variety of responses.

Let members know what you learned from the survey.

Complete the communication loop by writing about the results in the next newsletter. Be sure to say how you are going to respond to the results. If most members say that Tuesday is a bad day for getting shares, then think about changing the day. On the other hand, if one-third say there are too many beets, one-third say not enough, and the rest don't care, then maybe the number of beets is fine. However, let people know that you read and thought about what they wrote.

Design

There are two elements to survey design: the questions, and the layout of the questions on the page.

The questions on your survey should be short and direct. This keeps them from being open to many different interpretations, which makes your results unclear. Rather than having a question with several parts, try breaking it down into different questions.

With each question, you need to decide what kind of answer you want. Some types of answers are:

- Yes or no
- A scale of preferences, such as:
  never/sometimes/mostly/always *OR*
  strongly disagee/disagree/no opinion/agree/strongly agree

- A ranking of items, starting with what is most important or desirable and going to what is least important or desirable
- Open answers, which allow members to express their opinions in their own words

The layout of the questions should be simple and easy to use. Make response boxes or lines big enough for people to write in. Number the questions, and have them all start on the left-hand margin.

On the following pages are two sample surveys from CSA farms. They will give you an idea of what to ask and how to ask it. Blank survey forms for your use are included at the end of the chapter ***Members***, or you can design your own.

Twin Creek Shared Farm Member Survey with Results

Survey Results

The following are the results of a survey that was sent to all 220 shareholders of the farm. The survey was sent out in November 1992 and 140 responses were received by February 1993.

1. How important were the following in your initial decision to join Twin Creek Shared Farm?

ITEM	Of Little or no Import	Somewhat Important	Important or Very Important
Fresh, tasty vegetables	1%	5%	94%
Chemical-free vegetables	4%	8%	88%
Environmental concerns	5%	13%	82%
Support local farmer (share the risk)	3%	17%	80%
Support local economy	1%	19%	80%
Community involvement	27%	35%	38%
Connection to a farm (to visit with your children)	40%	31%	29%
Save money on groceries	43%	36%	17%

2. On the whole, what do you think has been the net financial effect of your participation in CSA? *(compared to getting vegetables from the grocery store)*

Saved money	27%
Cost money	27%
About equal	16%

Thirty percent of respondents refused to answer, saying this was not an issue for them.

3. What do you feel about the overall quality of the vegetables you received?

Better than supermarket	74%
Same as supermarket	25%
Poorer than supermarket	1%

4. How did you find the system of receiving vegetables as they ripened?

The majority of respondents liked the once a week depot-style delivery. Some commented that the one or two hour pick-up time was not long enough. Suggestions were made to have the depots at someone's house and expand the pick-up time to about 1:00 to 8:00 p.m. Having it at the co-ordinator's house would allow him/her to go about their other household activities while watching the vegetables. Many respondents commented on how "fun" it was to be surprised each week with the various vegetables. Others said that they would appreciate a "weekly forecast" on the vegetables to enable them to plan their menus. A few commented that they learned to plan their shopping trips for the day after the vegetable delivery.

5. Do you wish to receive a share renewal form for 1993?

Ninety-six percent of respondents answered "Yes" to this question.

Adapted from Jered Lawson, ***A Community Supported Agriculture Reader***, 1992.

SURVEY FROM ANNANDALE FARM

Annandale Farm Questionnaire

This should take about 20 minutes. We have tried to catch you in person. If you would rather talk to us, please call. "You" refers to you and your family. What's the consensus?

1. Why did you **initially** choose to be part of Annandale? *(Number in order of most important, 1, to least important, 7)*

   ____ a. organic
   ____ b. fresh
   ____ c. involvement in the farm
   ____ d. support local economy
   ____ e. price
   ____ f. delivery, convenience
   ____ g. community (social events)
   ____ h. Other: _____

2. Do the number thing again, this time for what **became** the most to least important aspects of the farm.

   ____ a. organic
   ____ b. fresh
   ____ c. involvement in the farm
   ____ d. support local economy
   ____ e. price
   ____ f. delivery, convenience
   ____ g. community (social events)
   ____ h. Other: _____

3. Were you satisfied with the quality of the vegetables? How could it be improved?

4. Did you miss or find a lack of any vegetables or herbs? What would you like more of in future?

5. Did you like the element of surprise in what vegetables you got each week?

6. Did you enjoy eating with the seasons, i.e. when the vegetables ripened locally?

7. Did this way of getting vegetables cost or save you time? Was the quality of time spent better or worse than the way you conventionally shop?

8. Can you suggest any improvements to our system of delivery?

9. Was the cost fair? Too high? Too low?

10. Did you enjoy the events at the farm? Can you think of any other activities in which you would like to be involved?

11. Would you like to be more involved next year, for example, with a working share? In any other way?

12. Did you become more aware of how your food is grown? What are some things you have learned?

13. Did you eating habits change? How?

14. Did you get enough vegetables to meet your needs? Please include the number of people in your home.

15. Did you like getting the recipes? Did you use any of them?

16. How would you describe this type of farm to your friends?

17. Is there anything else you would like to share with us?

Adapted from Tamsyn Rowley and Chris Beeman, ***Our Field: A Manual for Community Supported Agriculture***, 1994.

Community Supported Agriculture

Working with Members

Farm Activities

With a little effort, you can ensure that your members enjoy working on the farm, and that their time puts you ahead rather than holds you back. The two important tools are **training** and **communication.**

Training

You need to assess members' present skills, then decide what to teach them. They may already know how to handle cut flowers, and so require minimal training to help with your flowers. Also, you may have a number of crops, but teaching them how to harvest only a few will allow them to build their skills.

Training should consist of:

① Explaining and demonstrating correct task performance

② Helping members to perform the task under supervision

③ Allowing them to perform alone

④ Evaluating their performance

⑤ Coaching them based on your evaluation

Include in this training, instructions on safe working habits and use of equipment. Members should understand the possible dangers of tractors, other machinery, and hand tools such as hoes and knives. Also inform them of other hazards, such as holes in which they can twist an ankle or power lines they could accidently touch with an irrigation pipe. Finally, show them how to lift with their knees, minimize stooping, and other good work habits.

Once members have mastered a task, they can cement their skills by coaching someone else.

When training, keep the following ideas in mind:

- ✓ Present only a few concepts at a time
- ✓ Where possible divide tasks into simplified components
- ✓ Test the members' understanding frequently
- ✓ Involve everyone
- ✓ Use visual aids with oral explanations *(e.g. samples of defective fruit to watch for)*
- ✓ Encourage questions
- ✓ Give honest praise

COMMUNICATION

Messages sometimes get distorted. People may hear something different from what the person intended, while the speaker sometimes takes it for granted that the message is understood. Other times messages are distorted when they pass through several people.

Remember that communication is on-going and two-way. You will need to check back with people to see if new questions have come up, and to be sure that old questions or problems haven't resurfaced. Also, listening well is an important part of supervising.

Reference

This final chapter contains three reference sections:

Community Supported Agriculture

...Making the Connection

Frequently Asked Questions

What Happens If There is a Crop Failure?

The first thing to realize is that crop production is unpredictable. The chance that one crop will have a bad season, even "fail" outright, is fairly good. But on a diversified farm, the chance that all the crops will "fail" is pretty low.

Generally, CSA projects ask consumers to recognize that they are supporting the farm, through good seasons and bad. Ordinarily, farmers bear the risk of crop loss; CSAs ask consumers to shoulder some of that risk. Therefore, most do not make provisions for refunds. Some do promise to refund the members' money which has not already been spent for production, in the event of a crop failure.

CSA farms have found that some members do get angry when crops fail, especially if they don't get a refund of their money. The members that stay with the project, however, learn a lot about the problems that farmers face and recognize their own role in preserving small-scale, ecologically-sound agriculture.

What Happens If the Actual Expenses for a Shareholding CSA Exceed the Proposed Budget?

Farmers should be able to draw up a reasonable budget. If there is an overrun, then shareholding CSAs ask members to make up the difference. Some CSAs create a contingency fund of 10% of the budget, just in case expenses are more than expected. Others include on the commitment form a pledge to pay up to 10% or 12% more than the original share price.

If expenses are more than 10% or 12% percent higher than expected, it should be apparent early in the season. This situation generally calls for a renegotiation of the membership agreement, so that either farmers scale back production or members increase their financial commitment.

Community Supported Agriculture

Do Members Save Money on Their Farm Products?

This is a difficult question to answer. Products received through the CSA are not the same as other products, being fresher, tastier and sometimes different from those bought elsewhere. In addition, a CSA with a sliding scale may save some people money and cost others.

Nevertheless, the "sense" of farmers and members, backed by at least two studies[1], is that consumers pay about the same or slightly less for their produce when they buy through CSA.

How Do Members Know the Farmer Will Make a Good-faith Effort to Provide Sufficient Quantity and Quality of Farm Products?

Some consumers may find it strange to give their money to a farmer in return for receiving future products, some of which have yet to be planted. They may wonder why the farmer would grow as much as possible if he or she has already been paid.

This is the reason for having a personal relationship between the farmer and the members. Members who know the farmer realize the effort and commitment going into producing their shares. Talking with the grower, visiting the farm, even helping with the logistics of the CSA help members form the personal bonds that cement a project.

Community Supported Agriculture

Isn't This a Lot of Work?

A CSA is not ideal for every grower, or every consumer. Some will find it "a lot of work" because they do not enjoy it.

For growers who do enjoy connecting with a community of members and who like the style of farming a CSA requires, there are two benefits. First, much of the organizational work can happen in the off-season. Organizing for a CSA is like marketing in another outlet, only in most other outlets the marketing happens once you have a crop. This is often a very busy time. Because CSA allows you to handle your "marketing" in the off-season, you can concentrate on farming in the farming season. You also spread your work out better over the year.

The second benefit is less work. Many CSA farmers, including those in a study by Rochelle Kelvin for the Rodale Institute Research Center, report that they spend less time marketing in their CSAs than they did when selling through other outlets.

[1] ***Community Supported Agriculture*** (Kimberton, PA:Bio-Dynamic Farming and Gardening Association, Inc., 1990), p. 9b; and Trauger Groh, ***Farms of Tomorrow: Community Supported Farms, Farm Supported Communities*** (Kimberton, PA:Bio-Dynamic Farming and Gardening Association, Inc. 1990), p. 167.

Community Supported Agriculture

...Making the Connection

Resources

CSA Organizations

Bio-Dynamic Farming and Gardening Association, Inc., Kimberton, PA; 1 (800) 516-7797.

Community Supported Agriculture of North America (CSANA), contact Robin Van En, CSA Indian Line Farm, RR# Box 85, Great Barrington, MA 01230; or J. P. Schwartz, 818 Connecticut Avenue, NW, Suite 800, Washington, D.C. 20006.

CSA West c/o CASFS, 1156 High Street, Santa Cruz 95064; (408) 459-3964, FAX (408) 459-2799.

Equity Trust, contact Chuck Matthei; (203) 376-6174.

Periodicals

Growing for Market, a journal of news and ideas for market gardeners (P. O. Box 3747, Lawrence, KS 66046).

The Harvest Times, a CSA quarterly (P. O. Box 27, Mount Tremper, NY 12457).

Seasonal News, a quarterly CSA newsletter (818 Connecticut Avenue, NW, Suite 800, Washington, D.C. 20006).

Fairly Available Print Resources

Gerry Cohn, ed. ***Community Supported Agriculture Conference***. University of California, Davis, December 6, 1993. *(available from the Small Farm Center, UC Davis)*

Eliot Coleman. ***The New Organic Grower: A Master's Manual of Tools and Techniques for the Home and Market Gardener***. Chelsea, VT: Chelsea Green, 1994.

Community Supported Agriculture

Community Related Agriculture, An Introduction. Kimberton, PA: Bio-Dynamic Farming and Gardening Association, Inc. 1 (800) 516-7797, 1990.

Suzanne DeMuth. ***Community Supported Agriculture (CSA): An Annotated Bibliography and Resource Guide***. National Agricultural Library (Beltsville, MD 20705-2351), September 1993. *(also available from the Small Farm Center, Davis)*

Egg Inspection Manual. California Department of Food and Agriculture, Egg Quality Control. Revised December 1992.

Family Farm Series. Small Farm Center, Cooperative Extension, University of California, Davis. especially *"Marketing for the Small Farmer: Direct Marketing and Quality Control"* and *"Small Scale Cold Rooms for Perishable Commodities."*

Eric Gibson. ***Sell What You Sow: The Grower's Guide to Successful Produce Marketing***. Carmichael, CA: New World Publishing, 1994.

Trauger Groh and Steven S. H. McFadden. ***Farms of Tomorrow: Community Supported Farms, Farm Supported Communities***. Kimberton, PA: Bio-Dynamic Farming and Gardening Association, Inc., 1990.

Growing Across the Seasons: A Manual for Harvest Extension. University of California Cooperative Extension, Placer County *(available Winter 1995)*.

John Jeavons. ***How to Grow More Vegetables (Than You Ever Thought Possible on Less Land Than You Can Imagine)***, revised. Berkeley, CA: 10 Speed Press, 1991.

Johnny's Selected Seeds, Commercial Catalogue, 1995.

Rochelle Kelvin. ***Community Supported Agriculture on the Urban Fringe: Case Study and Survey***. Kutztown, PA: Rodale Institute Research Center (611 Siegfriedale Road, Kutztown, PA 19530; (215) 683-1400), 1994.

Jered Lawson. ***Community Supported Agriculture Reader***. 1992. (contact CSA West c/o CASFS, 1156 High St, Santa Cruz 95064; 408/459-3964, FAX 408/459-2799).

Michael Olson. ***MetroFarm: The Guide to Growing for Big Profit on a Small Parcel of Land***. Santa Cruz, CA: TS Books, 1994.

Dennis R. Pittenger. ***Home Vegetable Gardening***, ANR #21444, University of California Cooperative Extension, Division of Agriculture and Natural Resources, 1992. *(available at Placer County Cooperative Extension)*

Tamsyn Rowley and Chris Beeman. ***Our Field: A Manual for Community Shared Agriculture***. Wroxeter, Canada: CSA Resource Center. (519) 335-3557, 1994.

Joel Salatin. *"Sales Can Fail."* ***The Stockman Grass Farmer***, vol. 51, #6 (June 1994), p. 31.

Small Farm Handbook. Small Farm Center, Division of Agriculture and Natural Resources, University of California, Davis, 1994. *(also available at Placer County Cooperative Extension)*

Robyn Van En. ***Basic Formula to Create Community Supported Agriculture***. Great Barrington, MA: CSA Indian Line Farm (RR# Box 85, Great Barrington, MA 01230), 1992

Oscar A. Lorenz and Donald N. Maynard. ***Knott's Handbook for Vegetable Growers***. Third edition. New York: John Wiley and Sons, 1988.

Less Available Printed Material

Erwin Allerdings. ***CSA Information Package***. Saskatchewan, Canada: Prairie Farm Rehabilitation Administration - Agriculture Canada (#603 - CIBC Tower, 1800 Hamilton Street, Regina, Saskatchewan S4P 4L2; (306)780-8229), 1995.

William H. Blake, III. ***Community Supported Agriculture and Late Capitalism***. Master's thesis, University of California, Davis, 1994.

Communications Made Easy: A 4-H Guide to Presenting Information. 4-H Youth Programs, Cooperative Extension Service, Michigan State University.

Direct Marketing Resource Notebook. Agricultural Program Area, Minnesota Extension Service, University of Minnesota, 1990.

Growing Your Own Vegetables. United States Department of Agriculture, Agriculture Information Bulletin 409, December 1977.

How to Establish and Operate a Roadside Stand. Direct Marketing Program, California Department of Food and Agriculture.

James A. Johnson. ***The Sonoma Ecology Center Community Agriculture Project, First Annual Report***, 1994.

William Luckman and Robert Reynolds. *"Small Farm Finance."* ***Enterprise Farming***, 1986.

Kathleen Murray, Esq., ed. ***Child Care Center Legal Handbook*** *(out of print)*.

ADDITIONAL MATERIAL FROM *(CALIFORNIA UNLESS NOTED)*:

Beneficial Farms *(New Mexico)*

Fiddler's Green Farm

Full Belly Farm

Good Humus Farm

Green Heron Farm *(Pennsylvania)*

Orgasmic Organics

Twin Creek Shared Farm *(Winnipeg, Canada)*

Vegetable Club CSA

Watershed Organic Farm *(New Jersey)*

...and other CSA farms

Community Supported Agriculture

...Making the Connection

Glossary

Community Supported Agriculture

A partnership between consumers and farmers in which consumers pay for their food in advance, and farmers commit to supplying sufficient quantity, quality and variety of food.

CSA

Community Supported Agriculture.

Farmer-directed

A type of CSA in which the farmer does nearly all the work, using CSA to recruit loyal customers.

Land Trust

An arrangement in which a non-profit organization maintains land in agriculture.

Member

A consumer who buys farm products through a CSA.

Participatory

A type of CSA in which members help with planning or farm work.

Proposal

A written description, usually a flyer or brochure, of the farm, farmer(s), land, expected share contents, share price, and other facets of the CSA project.

Community Supported Agriculture

SHARE

A part or fraction of the harvest that a member buys. There can also be half-shares and quarter-shares.

SHAREHOLDING

A type of CSA project in which members divide up the whole farm budget between them, guaranteeing a salary or wage to the farmer. Members may all pay the same amount, or on a sliding scale. They do not know ahead of time how much they will receive in their share each week.

SUBSCRIPTION

A type of CSA in which members pay a certain dollar amount per week, paying for a month or a quarter in advance. The dollar value of the farm products in the share is pre-determined, although what exactly is in the share varies by season.