

Getting Started In Community Gardening

A guide to planning, design and implementation
of community garden projects

Acknowledgements

This guide draws heavily upon the excellent Community Gardening in South Australia Resource Kit developed by Claire Fulton, and the work of Russ Grayson and Fiona Campbell of the Australian City Farms and Community Gardens Network (ACFCGN). It is also informed by the systems and resources developed by the team at Cultivating Community in Victoria, the folk at Northey Street City Farm in Brisbane and CERES Environmental Park in Melbourne. Details of these organisations and resources are listed in the back of this guide.

This project was funded and coordinated by the City of Sydney Waste Education Team.

Citation

Thomas, F (2008), Getting started in community gardening, City of Sydney, Sydney.

Contact

City of Sydney

GPO Box 1591

Sydney NSW 2001

Phone: (02) 9265 9333

Email: council@cityofsydney.nsw.gov.au

Copyright

Copyright © is co-owned by Faith Thomas and Council of the City of Sydney

You may download, use or reproduce this work, in part or full, for the non-commercial purposes of promoting or developing community gardens.

Credits

Photos: Michael Neville, Russ Grayson, Vanessa John, Faith Thomas

Graphic Design & Layout: Peter Gould, Creative Cubed

www.creativecubed.com.au



This document has been printed on 100% recycled paper.

Table of Contents

Welcome	4
Getting Started	5
Checklist for new community garden projects	7
Establishing a community garden group	10
Developing community partnerships	11
Researching your project	11
Clarifying aims and objectives	12
Plans of management	13
Site assessment for new community gardens	13
Design considerations for new gardens	15
Funding your garden	19
Insurance	21
Implementing your design	21
Ongoing Management	22
Administrative systems	22
Health and safety systems	23
Maintenance systems	24
Social and Organisational Systems	26
Attracting new members	26
Orienting and educating new members	29
Internal organisation	31
Internal communication	33
Governance	34
Community partnerships	36
Essential Resources	40
Guidelines	40
Networks	40
Best practice examples	41
Books	41
Glossary	42
Appendices	44
1. Cultivating Community's Garden Rules and Guidelines	
2. Collingwood Children's Farm Gardener Responsibilities	
3. Veg Out Vows	
4. Community Gardening in SA Volunteer Induction Outline	
5. Community Gardening in SA Garden Safety Induction Outline	
6. Raymond Terrace Community Garden Volunteer Induction	
7. Raymond Terrace Community Garden Risk Assessment	
8. Raymond Terrace Community Garden Garden Safety Booklet	
9. Community Gardening in SA Organic Gardening Factsheets	
References	76

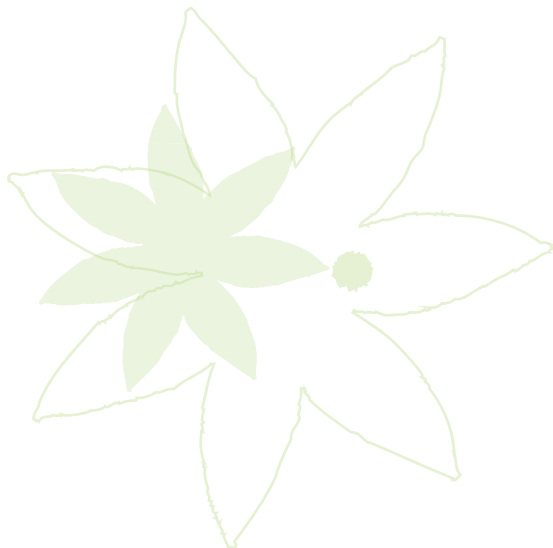
Welcome



This guide has been developed to assist community groups plan, design and implement a new or existing community garden project and to manage and maintain it in the long-term.

It is not intended to be prescriptive, but instead demonstrate the broad range of considerations that will contribute to the long-term viability of any community garden project. It is based on the experience of successful community gardeners, as well as research conducted into the factors influencing the success or otherwise of community-based natural resource management and community development projects

Community gardening is an immensely satisfying and enriching experiencing and it is hoped that this guide will go some way towards supporting the development of a strong network of diverse and beautiful gardens across Australia.



A bumper crop can be shared or swapped with other gardeners

Getting Started



The most successful community garden projects are those where the initiating group takes the time to undertake a detailed process of planning and design. Therefore the first part of this guide looks closely at the various aspects of project planning as they apply to community garden projects.

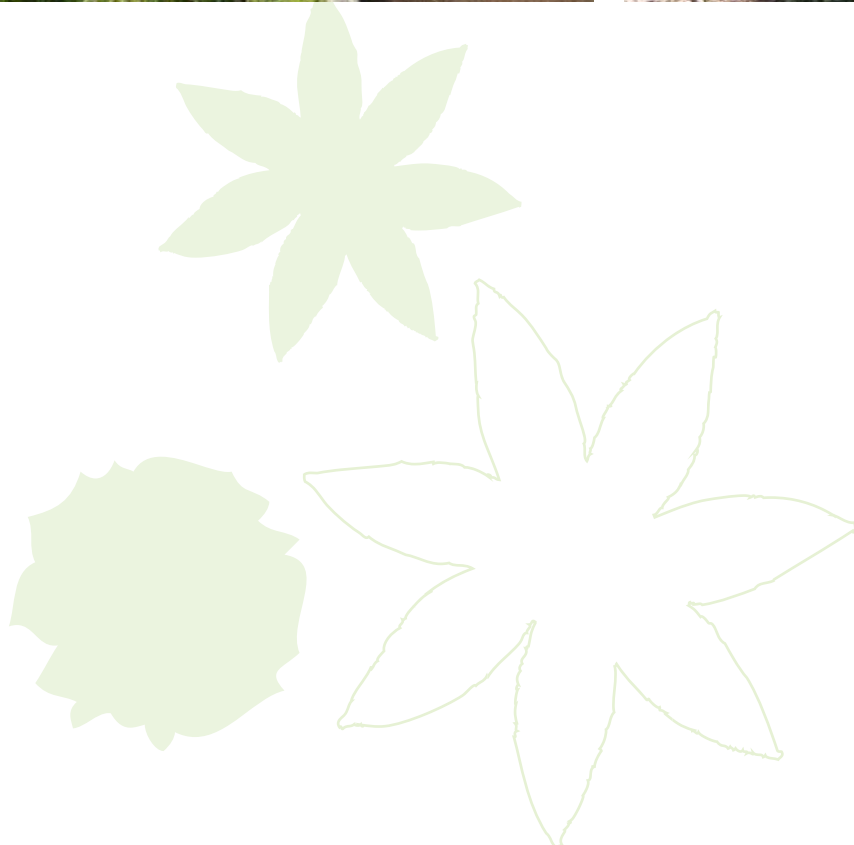
Before you start, the Community Gardening in South Australia Resource Kit suggests you ask yourself the following questions:

- Is there enough interest and energy within the group to sustain the project in the long term?
- Is a community garden the most effective way to address your community's needs, e.g. for food security, social opportunities, health promotion, environmental improvement or learning for sustainability?
- Would joining an established community garden be a better way to achieve your aims, while also strengthening and enhancing that garden?
- Would another form of 'gardening in community' be more appropriate, e.g. sharing and distributing produce from neighbourhood fruit trees, gardening collectively in backyards or starting a Bushcare group?

Although wonderful once established, starting a community garden is hard work and takes a great deal of time, energy and commitment. In order to avoid putting a lot of time and energy into a project that ultimately fails, work where it counts and address the following tasks as a priority:

- Develop a strong and committed garden group that can share the load, and form partnerships with other organisations in the community
- Research your project thoroughly;
- Work together as a group to agree on and articulate a clear vision for your project;
- Conduct some simple strategic planning that will provide a road map and priorities towards achieving your shared vision; and
- Design your garden carefully with your vision in mind.

By planning systematically and resisting the urge to rush into the implementation stage too quickly you will build a strong foundation for your project.



Checklist for new community garden projects

The following checklist is adapted from the Australian City Farms and Community Gardens Network. It is a useful starting point for gardeners seeking to clarify their aims and objectives before commencing a more detailed planning process.

1. What type of community garden?

- ☐ A shared garden where participants share the gardening and the harvest
- ☐ An allotment garden where participants garden their own plot and share the maintenance of common areas
- ☐ A garden with both allotments and shared gardening space.

How long can allotments be held while they are not being used?

What size will we make the allotments?

If not, will the gardeners make the garden available for others to provide educational services? Yes ☐ No ☐

Other educational activities:

3. How will we garden?

Organic gardening? Yes ☐ No ☐

Reasons:

If it is to be an organic garden, will this be explained to new gardeners when they join the garden - either verbally or in writing? Yes ☐ No ☐
/ Explained in some other way?

2. What will be the purpose of the community garden?

Recreation/community building:

- A place for people come to grow food and get to know each other
- ☐ A place where parents can bring their children
- Other:
- ☐
- ☐

Food security and nutritional health

- Access to fresh, nutritious food
- ☐ Reducing family expenditure on food
- ☐ Supplementing the family food supply
- Other:
- ☐
- ☐

Education

Will the garden be open to use and/or visitation by community colleges, schools and other educational bodies? Yes ☐ No ☐

Will gardeners offer public workshops (e.g. compost making, gardening etc)? Yes ☐ No ☐

4. What types of plants will we grow?

Remember that fruit and nut trees need to be spaced about 3-5 metres – sometimes more – apart. Ensure there is enough space to accommodate the trees you would like.

- ☐ Vegetables ☐ Herbs ☐ Fruit/ nut trees ☐ Flowers
- ☐ Berry fruit shrubs ☐ Water crops
- ☐ Medicinal plants ☐ Bush foods
- ☐ Herbal tea plants ☐ Native or indigenous plants

(native plants are those originating in Australia; indigenous plants originate in the local region)

5. What animals will we keep?

- ☐ No animals ☐ Chickens ☐ Other poultry ☐ Bees
- ☐ Other animals
-

6. What structures will we build in the community garden?

- ☐ Sitting area to shelter from the sun and rain
- ☐ Lockable shed for storing tools, seeds etc
- ☐ Nursery for plant propagation
- ☐ Fireplace for making coffee and tea - barbecue for preparing food
- ☐ Play area for children
- ☐ Public art
- ☐ Educational signs
- ☐ Rainwater tanks collecting water from shed/shelter roof to irrigate the garden
- ☐ Other:

9. How will we support biodiversity?

Will we plant the non-hybrid seed of heritage or heirloom vegetables and fruits so we can collect, save and replant the crops? Yes ☐ No ☐

Will the garden join the Seed Savers Network to learn more about food plant biodiversity, to obtain non-hybrid seed from the members of the network or to become the focus of a Local Seed Network?
Yes ☐ No ☐

Will we propagate and distribute seed of endangered or rare local native (indigenous) plants? Yes ☐ No ☐

7. What training do we need?

Gardening and construction skills

- ☐ Plant propagation ☐ Soil analysis
- ☐ Improving soils ☐ Making compost
- ☐ Using mulch - irrigation ☐ Pest management
- ☐ Seed saving ☐ Construction
- ☐ Developing a planting calendar
- ☐ Planting out and harvesting ☐ Other:

Design skills

- ☐ Site analysis for site design ☐ Garden design

Education

- ☐ Cooking what we grow ☐ Other:

Are any of these skills available within the group?

Yes ☐ No ☐ If not where will we find these skills?

10. How will we educate gardeners and the public in waste reduction?

Will we demonstrate the reuse and recycling of waste organic matter through:

- ☐ Compost ☐ Worm farms ☐ Mulching
- ☐ Use of recycled materials ☐ Other:

11. How will we conserve water in the garden?

- ☐ Rainwater tanks ☐ Mulching
- ☐ Low-water-use plants ☐ Efficient irrigation

Other:

8. How will we cooperate with local government?

Will the garden be a place where communities and local government can work together to demonstrate social and environmental practices compatible with the aims of community gardening, such as:

- ☐ Waste reduction ☐ Water conservation
- ☐ Regreening ☐ Energy efficiency ☐ Biodiversity
- ☐ Nutritional health ☐ Agenda 21 ☐ Other:

12. How will we fund the garden?

- ☐ Apply for grants ☐ Membership fees
- ☐ Other types of self-funding

How will we fund ongoing costs?



Gardens in high-density housing communities are a place to stay in touch with nature

13. What will we look for in a preferred site for the garden?

- ☐ Size of area needed
- ☐ Access to public transport
- ☐ Access to sunlight, water and wind protection

Comments/suggestions:

.....

.....

.....

14. Description of the proposed management structure for the garden:

Will the organisational structure be an incorporated association? Yes ☐ No ☐

Will the garden obtain public liability insurance? Yes ☐ No ☐

How will decisions be made?

.....

.....

What will be the proposed conflict resolution process?

.....

.....

How will new members be recruited?

.....

.....

15. How will gardeners ensure there are no problems with:

Odour:

.....

Vandalism:

.....

.....

Excessive noise:

.....

.....

Site aesthetics - how the site looks:

.....

.....

Rodents:

.....

.....

Parking:

.....

.....

Non-gardener access:

.....

.....

Other:

.....

.....



In a group the work load is much lighter and there is shared satisfaction in the outcome

Establishing a community garden group

A community garden is built on a sense of community and cannot succeed with the enthusiasm of just one or two people. Forming a working group of committed folk with a range of skills and experience is the first step in establishing the groundwork for your project.

The size of this group will depend on the project but may be as large as twenty or as small as five. A larger group will provide more energy and input, but a smaller group may be easier to manage in the initial stages

Holding a public meeting is one way to recruit involvement. As well as inviting people you know, extend the invitation to your local community including environment or gardening groups and resident associations. Put an advertisement in the local paper and letterbox the local neighbourhood, particularly if you already know where the garden is likely to be located.

At the meeting avoid putting forward your own already developed ideas for the garden. Instead, consider having someone from an established garden give a presentation on their project and present the benefits of community gardens generally. If possible, have a skilled facilitator run the meeting, someone who is able to draw out ideas from the group and ensure these ideas are recorded. At the end of the meeting, get names and contact details of everyone who wants to be involved. This will form the basis of your project contact list.

Anticipate that there may be concerns about the project. Make sure there is room for these to be heard and that you have the background information to address them.

If concerns persist, don't bulldoze ahead with the project. In the long-term you will need the support and goodwill of everyone in the community in order to get the best possible outcomes. It is best to take a little time working with the people concerned rather than assuming the problems will go away by themselves.

Once you have established a committed group, work to develop trust and collaboration through social events such as BBQs, skill-sharing workshops and planning days.

Maintain enthusiasm through celebration and activities that foster both personal and group development.



Developing community partnerships

Many successful community gardens have developed strong supportive partnerships with other community groups, businesses and organisations in their local area.

This can be a source of valuable resources, collaborative projects and ideas. Links with other community gardens can provide knowledge, experience and advice, while partnering groups such as a migrant resource centre can provide opportunities for participation by individuals who generally find integration within the community difficult.



Kids have great ideas and should be consulted as well

Researching your project

One of the best ways for your group to learn about how to develop a successful community garden project, and how to avoid the pitfalls, is to undertake a tour of existing community gardens. A community garden tour can be a great way to attract involvement in your project and can generate lots of ideas and enthusiasm. You will also make many supportive connections that will be useful as your project progresses. Remember to document what you learn by taking notes and photos.

Russ Grayson and Fiona Campbell from the Australian City Farms and Community Gardens Network suggest asking the following questions when visiting other community gardens:

- How did the garden start?
- What type of organisational structure do you have?
- What do you do about public liability insurance?
- Where do you obtain resources (mulch, compost, seeds etc)?
- What are your links to local government?
- How are you funded?
- How do you make decisions, solve problems and resolve conflict?
- How do you pass on skills to new gardeners and improve people's skills?
- How did you build a sense of community around the garden?

If there are no community gardens in your local area, look up the websites listed at the back of these guidelines for further information and resources, and for case-studies of successful community garden projects.

Clarifying aims and objectives

It is important for the group to develop a shared vision for the garden and to establish exactly what they want to achieve.

A community garden can be many things to many people and unless group members are clear and in agreement as to what the purpose of the garden will be it is likely that conflict will emerge at an early stage and the project may not yet have the integrity to survive it.

There are many good books that describe the basic process of strategic planning: how to develop a group vision and a plan of action for achieving a prioritised set of objectives. It is recommended that groups invite a skilled facilitator to assist with this process, someone who is not an active part of the garden group so that they remain neutral in discussions. This ensures that all group members have the opportunity to provide input and to have their voices heard.

At the outset, keep an open mind and dream big. You might not be able to have that solar cooker straight away but having it in your plan might inspire someone in the group to develop it later on. Spend time brainstorming what the group would like to see the garden become in five years time. Some things to consider are:

- Community art (e.g. sculpture, mosaics and murals)
- Social spaces, seating and outdoor eating areas
- Shady and covered areas
- Spaces for performance and areas for workshop delivery
- Tool sheds and work areas
- Signage, displays and noticeboards
- Children's play areas and special plots for children or local schools
- Bike parking space
- A bush tucker trail, sensory or butterfly gardens
- Animals e.g. chickens, bees or ducks
- Composting and waste management areas
- Storage areas for materials such as manure or straw
- Fruit trees
- Plots and shared garden areas
- Rainwater tanks and an irrigation system
- Predatory insect attracting plants to help manage pests
- Propagation area and a stall for sale of plants

Once you have a shared vision you can begin to plan in earnest. Create a five-year action plan that prioritises tasks, allocates responsibility for these tasks to different group members and sets a timeframe for their completion.



What you include in your community garden is limited only by your imagination

Plans of management

Developing a plan of management for your garden will help clarify the practical procedures by which the garden will be developed and organised.

A plan of management also demonstrates to the landowner and to funding bodies that an appropriate level of thought and research has been undertaken before implementing the project.

The plan of management should include the following:

- Statement of purpose;
- Aims and objectives, including the long term vision for the garden;
- Proposed management structure;
- Proposed induction process for volunteers;
- Proposed risk management framework and completed risk assessment;
- Provision for public liability insurance;
- Proposed decision-making framework and conflict resolution processes;
- Proposed policy regarding sustainable land management including management of soil, water, energy, organic and non-organic waste, biodiversity and building materials;
- Proposed policy regarding access, equity and membership;
- Proposed policy for the allocation and management of plot gardens;
- Proposed funding model, e.g. membership fees, fundraising, grants;
- Proposed policy regarding drugs and alcohol, including smoking onsite;
- Any potential partnerships the group envisages, e.g. with local schools;
- Contact details for project coordinators; and
- Considerations of accessibility including proximity to public transport.

Site assessment for new community gardens

Before developing your plan of management, the garden group should undertake a detailed assessment of the proposed site to identify risks, opportunities and possible threats to the project. With a clear understanding of the site the group will have a good foundation for success.



Gardens in high-density housing communities are a place to stay in touch with nature

The site assessment should include consideration of the following:

- What community groups and businesses are nearby that might support/partner or object to the project? Consider churches, schools, childcare centres, community or aged care facilities, environment groups, restaurants, chambers of commerce, garden stores, nurseries etc.
- Who lives nearby? What are their age groups? What are the employment levels? Is housing primarily public, community, private rental or owned? What are people's cultural and linguistic backgrounds?
- How safe and secure is the site? Is it near other community facilities? Can it be seen from nearby houses or shopping areas? Is there any graffiti or vandalism? Is there lighting? What is the crime rate in the area?
- What other land uses surround the site? Consider commercial, industrial, open space, major roads and residential.
- What is the land currently used for? E.g. as a shortcut for local residents, a place to dump rubbish or for illegal activities, children's play or sport, walking dogs or even sleeping. Will the project conflict with these uses?
- What plants are already on the site? Are there areas of weed infestation? What plants grow well in the local area?
- How big is the land? How much of the land is really suitable for gardens?
- Who owns the land? What is the land use zoning category? What does this zoning allow/restrict?
- How does water move through the site? Does it soak in quickly or cause water-logging? Are there flooding issues?
- What is the current ground-cover? E.g. grass, gravel, paving, compacted earth, concrete.
- What is the slope of the land? Is there opportunity for terracing or swales? Swales are mounds and trenches built on the contour of the slope that allow infiltration of water.
- What is the soil type? Has soil testing been undertaken? What is the history of the site? Is there a risk of soil contamination?
- How many hours of sun does the site get each day? Are any large trees or buildings blocking solar access?
- What direction does wind come from? Is the wind likely to affect plant growth? Is there wind turbulence caused by nearby buildings or walls?
- Are there any existing structures on site? Consider buildings, seating, sheds, walls, fences, paving and existing gardens.
- Are there existing services to the site? Consider electricity, water, phone, sewers, stormwater drains, public transport and parking.
- Are there major roads nearby? If so, are there barriers to pollution and noise from traffic? Is it safe for small children?

Adapted from the Community Gardening in South Australia Resource Kit

Allow plenty of time for your site assessment. The better you get to know your land the more realistic and successful will be your garden design.

Design considerations for new gardens

It is useful to obtain professional guidance in the design of proposed community gardens, maintaining a participatory process through a series of meetings and design workshops. Better still, recruit a permaculture or landscape designer onto your working group. In particular, the following points are worth bearing in mind:



Small community gardens often make innovative use of vertical space

- **Design for low-waste** – maximise the opportunities for onsite management of organic waste generated by the garden, specifically compost and worm farming systems, as well as, potentially, organic waste materials produced by the surrounding community;

- **Design for integrated soil fertility management** – Aim to grow the biomass (organic material) you need for mulch and composting on-site, incorporate legume species that both produce biomass and fix nitrogen (an essential plant nutrient) in the soil for other plants to utilise, and design in crop rotation. Crop rotation moves different types of plants through the garden beds in sequence so as not to exhaust the soil of nutrients and to help in the management of plant diseases;



Compost bins dotted around the garden are easy to use and learning happens naturally

- **Design for sustainability** - Use recycled and local materials in construction, avoid importing soils and other inputs; grow a variety of plants that can be used;

- **Design for water management** - maximise opportunities for water harvesting and passive irrigation while reducing run-off to the stormwater system. On sloped sites, use swales, terraces or beds that run along the contour of the slope to catch water;



Cosmos is one of many flowering plants that attract beneficial predatory insects

- **Design for solar access** – planting and positioning of buildings and infrastructure should not block northerly and easterly sun. Plantings of shrubs on the western boundary can provide shade from the hot afternoon sun;

- **Design for integrated pest management** – include a range of plants that provide habitat for small birds, frogs, lizards and predatory insects; include sources of water such as ponds and bird baths;

- **Design in windbreaks** – plantings of native (or exotics adapted to dry conditions) trees and shrubs on the southern and western perimeters will protect the garden and reduce evaporation of valuable moisture in the soil;

- **Design for biodiversity** – when carefully designed, community gardens can be part of a city-wide network of local native bird and animal habitat, as well as a demonstration of rare and local food species (exotic birds will also make use of the habitat created);



Ducks are great for keeping snails and slugs under control



Aloe vera is a great plant if you've had a little too much sun!



Perennial fruit trees give long-term structure and productivity to the garden



Small hives for native stingless bee improve pollination of fruit trees

- **Design for the senses** – A garden designed to engage the senses will be a place where people want to be. It will also enable your garden to 'speak' to a wider cross-section of the community including children and the disabled. Try to include scented plants, colour, public art and auditory elements such as wind-chimes;



If you want to have butterflies, you've got to put up with a few caterpillars!




A large tree with bench seating can become a simple outdoor amphitheatre

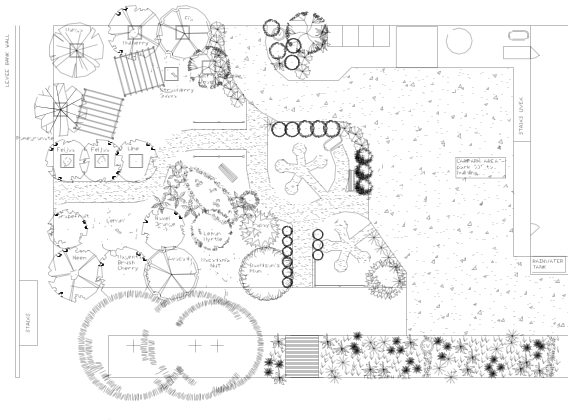
- **Design for learning** – Think about how groups will be accommodated; design in outdoor learning areas and paths with nodes that allow a group to pause for discussion. Create opportunities for experiential learning, demonstration and practical small-group activities.



Remember to consider access for those less mobile

- **Design for accessibility** – Think about those with limited mobility. Raised beds should be incorporated where possible, pathways made wide enough for prams and wheelchairs to pass and beds made narrow enough for gardeners to reach the centre without strain. If gardeners with limited mobility do not join the garden immediately, the beds will still be more comfortable for all gardeners to use;

- **Design for sociability** – Ensure you incorporate seating and informal sheltered spaces for eating, chatting and planning as a group;
 - **Design for safety** – maintain clear lines of sight; incorporate seating to encourage people to spend time in the garden and avoid creating enclosed or hidden spaces; Bearing safety in mind, spaces may still be created for people seeking solitude, for meeting with one or two others or to create a sense of intrigue in a garden that unfolds as you move along a twisting path;
 - **Design for cultural diversity** – include the plants and cultural traditions of the various cultural groups who make up your neighbourhood. Invite these communities to participate in the design process.
- 
- A close-up photograph of a green leafy vegetable, likely a type of chard or spinach, showing the veins of the leaves. The leaves are vibrant green and have a slightly crinkled texture. The central vein is prominent and lighter in color. The background is dark and out of focus.



*Design for the Raymond Terrace Community Garden,
developed by Moving Shadow Landscape*



Actively involve as many people as possible in the garden design process. This will ensure that everyone's ideas are heard and the resulting plan will be something that everyone can 'own' and relate to.

If required, get some professional assistance in the production of the final design. An accurate and attractive site plan is inspiring to new members, especially at the initial stages of implementation and will keep the project on track if core founding members move on.

Remember that the initial garden design will continue to evolve as you implement the project. Be flexible to this and allow input from new group members who may not have been a part of the initial design process.

Funding your garden

Once you have a clear vision for your garden and a plan for implementing that vision, you will need to develop a budget and consider where you will obtain the necessary financial resources. In-kind support (such as donations from local businesses and Council), reusing 'waste' resources and applying for grants are some of the ways community garden groups have resourced their projects.

The requirements of each unique garden will vary, but most gardeners will need to consider the following:

- Costs of involving the community (e.g. producing promotional material, mail-outs, local advertising and venues for meetings);
- Public liability insurance;
- Construction materials (e.g. termite-free recycled sleepers or bricks);
- Organic material for no-dig bed construction;
- Tools and equipment (e.g. hand-tools, wheelbarrows, watering cans, hoses and propagation supplies);
- Irrigation equipment;
- A lockable toolshed;
- Rainwater tanks, including costs of fittings and professional installation;
- A small selection of books as a resource for the group; and
- Permanent or casual staff, such as a co-ordinator or design consultant.

Accessing funds

There are many ways community gardeners can access funds for their project, depending upon its scale and focus. Plan your fund-raising efforts carefully, ensuring that the money raised is worth the time and energy expended. Successful ways that community gardeners have raised funds include:

- Events – open days, celebrations, festivals and markets can all attract a donation for entry as well as income from the sale of plants and other products. You may also attract new members this way
- Annual plot and membership fees – a consistent income stream that is enhanced by incentives such as a library, newsletter or free workshops
- Lease of space – a well developed community garden can be leased to local educators and community groups for courses and workshops
- Visitor donation box – decorate it to attract attention
- Nursery – a number of community gardens operate successful nurseries specialising in edible plants. These attract people to the garden, provide consistent income and sometimes employment for committed members



A well-established native plant nursery at CERES Environment Park in Melbourne

- Educational tours – community groups, schools, TAFE and university courses may pay to visit a well developed site that demonstrates key sustainability principles
- Courses and workshops – this can be a significant source of income in a well designed and developed garden with appropriate facilities
- Commercial crops – some high value organic crops may sell well in local cafes
- Sausage sizzle or café – on market days and events, food and drinks always sell well
- Products – recipe books, jams and preserves, craft items, heritage seeds, guidebooks... there are many options here.
- Services – some community gardens have developed successful consultancy arms that provide an income stream
- Grant funding – Community gardens provide a diverse range of social and environmental benefits so they are eligible for a wide variety of local, state and federal government grants. Visit www.ourcommunity.com.au and www.grantslink.gov.au for further information on obtaining grants



A café, such as this one at Northey Street City Farm, can be a great source of income

Reuse and in-kind support

Community gardeners are traditionally very skillful at turning waste into resources, as using recycled materials make both financial and environmental sense. Investigate the following:

- Lawn clipping for composting from local mowers and landscapers;
- Animal manure from a local race-track or police stables;
- Food waste from restaurants, fruit and vegetable shops and residents;
- Woodchips from Council or a local street tree lopping contractor;
- Plant cuttings and heritage seed varieties from other community gardens or neighbours. Once your project is up and running you can reciprocate;
- Out-of-date or root bound plant stock from local nurseries;
- Recycled building materials from local demolition businesses; and
- Old sleepers from the State Rail Authority.



Recycled construction materials are both attractive and sustainable

Local businesses may be happy to negotiate on-going discounts, donations or sponsorship of the project in exchange for publicity in your newsletter, project signage or promotional material. Invite them to visit your project or take your design to them and discuss potential partnerships based on a shared concern for the local community.

Insurance

It is recommended that all community gardens be covered by public liability insurance, either by obtaining a policy of their own or through becoming auspiced by another organisation. Insurance protects both the garden and the landowner against charges made against them if a visitor is hurt or injured.

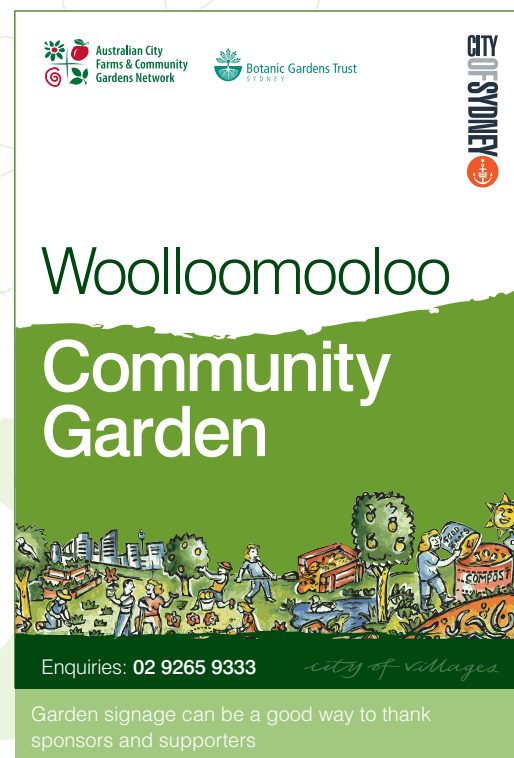
It's a good idea to talk to other community gardens about insurance. Ask them what kind of cover they have, how much it cost and what level of service the company provides. Community gardens are a unique land use that does not fit easily into established insurance categories. This can lead to significant variations in the cost of premiums, so shop around.

Consider having your project insured with another community garden, as an umbrella policy is likely to be much cheaper. Alternatively, you could have your project auspiced by another organisation, such as a garden club, neighbourhood centre or Landcare, that can include you in their insurance policy.

Make sure you review your insurance every year as progress and changes to your project, such as employment of staff, increasing numbers of volunteers, changes to activities and investment in equipment, could change your requirements and/or premium costs.

Implementing your design

Consider available funding and human resources when commencing implementation of your project. Take on manageable tasks with sustainable outcomes, such as planting fruit trees and constructing compost bays. These will survive periods of inactivity whereas plantings of annual vegetables will not. Celebrate your successes and maintain enthusiasm during this initial stage of hard work and occasional setback. Be patient. Persevere. Build social capital.



Ongoing Management

The development of systems for the management of each aspect of your project is essential. These systems include the development of policies and procedures for the management of community participation, maintenance, administration, ongoing infrastructure development and garden safety. Although this takes time, it can be the locus upon which the success or failure of your project hinges.

Administrative systems

Unfortunately, community garden projects aren't just about gardening. There are a few crucial administrative matters that will need to be attended to.

Keeping records

A simple notebook or spreadsheet is useful for volunteer and member contact details.

Use membership and plot holder application forms to collect the details you require. If designed carefully, this spreadsheet can make distributing information simple and efficient allowing quick access to email addresses for distribution of paperless newsletters and promotional material for events and workshops.

Documentation of the project is very important, both to promote the garden's progress and to obtain and keep funding. Maintain records of member numbers, volunteer hours and the demographics of those involved. Regularly take photographs of the project's progress and significant events for use in promotional material and grant applications.

Handling money

Community garden projects must abide by many of the same laws regarding management of money as a small business. If you are selling a product, acquire an Australian Business Number (ABN) through the Australian Taxation Office. Always include your ABN on receipts you issue, e.g. for membership fees or plant sales.

Conversely, always obtain a receipt for anything you purchase. This is especially important if you are spending money from a grant that will need to be reported on to a funding body. Keep careful records of all income and expenditure to avoid confusion later on.

Health and safety systems

Don't underestimate the potential for serious injury in a community garden. By anticipating problems before they occur, and implementing systems to avoid or minimise them, you will protect both the community from injury and your project from costly and potentially damaging allegations of negligence.

Conduct a thorough risk assessment that considers the following, with particular reference to the safety of children and the elderly:

- Poisonous or potentially allergenic plants;
- Trip hazards;
- Sharp or dangerous edges;
- Manual handling and heavy loads including the use of wheelbarrows;
- Use of sharp or dangerous tools;
- Use of soils and manures;
- Dangerous materials e.g. barbed wire; and
- Poisons and pesticides.



Sun sense is a key aspect of safe gardening.
Broad-brimmed hats are a must

Develop a health and safety policy outlining the way your project will minimise the risks you have identified. Include safety procedures for any chemicals or power tools you will be using. A thorough volunteer induction process, including the provision of a health and safety training session and guide book, is essential. Examples are included as an appendix to this document.

Make the environment safe and provide appropriate facilities and tools, including shade, sunscreen and personal protective equipment such as hats and gloves. Provide a well equipped first-aid kit and ensure everyone is made aware of its location and contents at induction. Having gardeners who attends regularly do a first aid course could prove useful. A logbook for the recording of accidents and incidents should be kept with the first-aid kit.

Maintenance systems

Many people working in community gardens like to have their own plot and this has many advantages. However gardens made up solely of plots can provide few opportunities for cooperation and community building. Some of the best community gardens have a balance of individual plots and communal space. Chat to other community gardeners about you options.

Individual plots

Individual plots don't necessarily have to be laid out in rows; if well thought out they can be attractively integrated into an overall design. This is generally beneficial for the overall functioning of the space in terms of integrated pest management, water sensitive design and solar access.



A wheelbarrow is a great place to rest after a hard day's work!



Plots can be designed to effectively blend into the overall design of the garden



Herbs are easier to grow than vegetables and are good for beginner gardeners

In developing a management system for plot gardens you will need to consider:

- Will fees be charged annually or quarterly? How much will they be?
- Will small plots attract a lower fee and will you have a concession rate?
- Will plot holders need to agree to participate in other garden activities?
- Will there be rules regarding use of chemicals and artificial fertilisers?
- Will some plants, such as invasive species, be disallowed?
- Will plot holders be required to maintain solar access to other plots?
- How long will people be able to leave their plot fallow before it's reclaimed?

Adapted from the Community Gardening in South Australia Resource Kit

Communal areas

While maintenance of individual plots is the responsibility of the individual, maintaining communal areas can be a challenge unless a management system is implemented from the outset.



Does your garden grow things kids like to eat?

One way of ensuring that communal areas are maintained is to stipulate that all plot holders attend a monthly work-day, or participate in a working group. Working groups will be discussed in more detail later in these guidelines.

Maintaining the garden in an attractive, safe and functional state is an important aspect of being a responsible neighbour. It will also make the garden appealing to visitors, attracting new members and showcasing the aesthetic as well as the practical aspects of sustainable gardening.

A number of tools can assist in the smooth functioning of garden maintenance systems including:

- Rosters for specific tasks e.g. feeding chickens or turning compost;
- Logbook for recording specific tasks undertaken – this shows clearly who is doing the work;
- Allocation of specific roles and responsibilities with corresponding incentives where appropriate e.g. green waste coordinator;
- Work-groups for specific tasks e.g. animal systems; and
- Regular work days accompanied by social activities and shared meals.



An innovative green waste recycling system at Northey Street City Farm

Social and Organisational Systems

A common reason for the failure of community garden projects is a lack of emphasis on the design of internal governance and communications structures. In a recent research paper (Ketai, D, 2006), Devorah Ketai identified six aspects of garden management that are key to their long-term success. These aspects are:

- Attracting new members;
 - Orienting and educating new members;
 - Internal organisation;
 - Internal communication;
 - Governance; and
 - Community partnerships.
-

Attracting new members

Attracting new members to your community garden can be difficult at the outset when there is little tangible evidence of the project. Some ideas that have worked for other successful gardens include:

- Having an attractive and professionally drawn design plan;
- Ensuring your vision and objectives are clear and easily communicated;
- Registering the project with a local volunteer network;
- Having well publicised working bees and BBQ's; and
- Inviting the involvement of schools, local residents and friends.



Places to sit and enjoy the garden will encourage people to visit



Colourful and well-designed signage will attract attention to your project

As the project develops it will be easier to attract involvement. Try:

- Running short, practical workshops;
- Holding open days, events and celebrations; and
- Including musical and artistic events as well as gardening.

In order to maintain the long-term interest of a visitor to your garden, you need to make them feel welcome and ensure they understand what the project is about. Take the time to sit down and chat. Answer any questions they might have and explain how they can get involved.

Have a brochure explaining the garden's aims and objectives available to give to visitors and, as the garden develops, erect attractive project and interpretive signage that makes your vision clear to visitors from all walks of life. Graphical signage is important for children as well as those who don't read much English.

If you have a clear calendar of work days and events, this gives you a reason to invite people to come back. It also helps to have a clearly defined structure of roles and responsibilities, or work groups, that you can invite the visitor to participate in. For example, over coffee you might discover that a visitor works in marketing, a skill that perfectly fits the needs of the garden promotions team.

Let visitors know that the garden is owned by the community and is open to ideas and feedback from everyone. Illustrate this by providing a box for visitor comments and take these comments seriously!

Design and aesthetics

Think about how people will see the garden from outside. Paying attention to aesthetics is important, not only for attracting new members to your garden but for ensuring good relations with your neighbours.

Design your garden to be:

- Beautiful and welcoming; and
- Safe, orderly and well maintained



Sculptural works from recycled materials can really make a statement!



Art in the garden can be a source of fun and amusement



Even kids can grow sunflowers! And they create a happy atmosphere

Thoughtful design can invite involvement. Such designs pay close attention to the presentation of the entrance area, provide sheltered seating areas and have welcoming signage. Such signage clearly and graphically explains the gardens purpose and how people can get involved.

Orienting and educating new members

If you want people to stick around you need to develop a process for including them, familiarising them with your project and making them feel they are a valuable member of the group. Conducting a volunteer induction process is therefore essential, ensuring that all new volunteers are aware of:

- Their rights and responsibilities;
- Occupational Health and Safety;
- Training opportunities; and
- Garden policies and procedures.



It is recommended that garden coordinators develop a system of governance that allows volunteers to take on increasing responsibility as their involvement in the project deepens. This may be through the creation of a number of sub-coordination roles where a person can take responsibility for the management of certain aspects of the garden (e.g. compost systems, community events or promotion). This allows for the development of a resilient social ecology that is not dependent for its success on the involvement of one or a few key people.

Retaining volunteers is about matching their skills with a role that makes them feel valued and where they are achieving their own aims and objectives. This means taking the time to get to know the volunteer and finding out what they have to offer, and in what way they can best share their skills and experience.

Ask the volunteer what they hope to achieve by participating in the project. A volunteer application form can be used to ascertain the skills, experience and interest each volunteer brings to the project and what they hope to achieve. See volunteer involvement as a fair exchange, acknowledge and support volunteers, and ensure they are getting something of value from the experience. Encourage creativity and independent activity within a clearly defined structure.

Appointing someone with good interpersonal skills as a volunteer co-ordinator is a very good strategy for maintaining volunteer involvement in the long-term.

Volunteer rights and responsibilities

To facilitate the development of a healthy social ecology where everyone feels safe and included, volunteers working in community garden should have the following rights:

- To receive all necessary information about the group and its policies;
- To receive a clear instructions about the task they are undertaking;
- To be able to negotiate the jobs, times and work days that suit them;
- To understand who is responsible and for what;
- To be included in meetings, social events and in decision-making;
- To receive proper training, initially, and on an on-going basis;
- To know who to go to with problems and difficulties;
- To have their work valued and to receive constructive feedback;
- To have the protection of insurance and safe working conditions;
- To be provided with the right tools for the job;
- To say 'no' if they feel unhappy with what is being requested of them;
- To be reimbursed for of out-of-pocket expenses, to an agreed limit;
- To carry out their role without being exploited; and
- To be consulted on issues which affect them.

Conversely, volunteers have the following responsibilities:

- To respect other gardeners and visitors to the garden;
- To communicate information and concerns with other group members;
- To take responsibility for the decisions they make;
- To accept group decisions;
- To address areas of conflict with those involved;
- To ask for and give support when it is needed;
- To work safely and be aware of their duty of care to others, and;
- To accept the presence of people with different philosophical, political and religious allegiances and points of view

Adapted from the Community Gardening in South Australia Resource Kit

Written guidelines for new members

An information package containing fact-sheets, important policies and procedures, contact telephone numbers, the garden code of conduct and other details is an important aspect of engaging new volunteers. It ensures they are able to fully participate in the activities of the garden, makes them feel included and informed and prevents misunderstanding and conflict that might otherwise crop up at a later date.

Creating opportunities for learning

Because people come to community gardens with a wide range of skills and experience, they are the perfect environment for informal peer-based learning to occur. Being aware of this process and facilitating it can be as simple as providing opportunities for gardeners to chat and socialise together. Other ideas and strategies are outlined below.

○ Printed and video resources

Fact-sheets outlining basic organic gardening are an easy way to introduce new gardeners to a range of skills (see appendix 8). To supplement this, a small library of well chosen books, DVDs and magazines is also useful, as are planting guides and posters.

○ Mentoring

Encourage leadership and enhance learning by providing opportunities for skilled gardeners to mentor new ones. As these mentors become more skilled they may expand their focus to become educators within the wider community.

○ Workshops

Hosting skill-sharing workshops at the garden is another way of facilitating learning. Workshops can be presented by skilled garden members or you can bring in an expert to build capacity within the group. Make sure all group members have a say in what skills they feel need to be developed. Opening up workshops to the community can raise funds, attract new membership and spread the good word on sustainable living.



Community gardens provide many opportunities for informal learning

Internal organisation

A community garden without well-developed systems of internal organisation may not last long, because without clearly defined structures, responsibility tends to rest unduly on the shoulders of a few people who quickly burn out and become discouraged. The following are some ideas for internal organisation of community gardens.

Working groups

Working groups and sub-committees can be extremely effective ways of getting things done in a community garden. Ensure groups are provided with the information and resources they need to get their job done and that roles are clearly defined to avoid confusion.



Working groups are great for complex tasks that require a range of different skill sets

Skills-mapping

Your group will function more effectively if you all know what each person has to offer. Being aware of the skills each member has will help the group evolve into an effective social ecology, where everyone's skills are fully utilised and valued. Each person should conduct a basic skills-audit which includes the following:

- Networks and membership of community organisations
- Gardening skills
- Technical skills
- Access to equipment
- Administration skills
- Interpersonal and communication skills
- Leadership and learning and facilitation skills
- Fund-raising skills
- Promotion and marketing skills
- Local knowledge
- Licences for use of equipment or vehicles
- Research and writing skills

Adapted from the Community Gardening in South Australia Resource Kit

Decision-making

Some garden groups opt to make decisions democratically, by vote after formal discussion at public meetings, while others choose a consensus decision-making model. Whatever the structure, transparent and inclusive processes are essential.

Effective facilitation at meetings can make decision-making easier, particularly where there is conflict involved, and garden coordinators should consider developing skills in this area.

Garden rules and policies

Everyone involved with the community garden needs to have input into and/or be made aware of the rules and policies that underpin the project.

Member agreements are one way of ensuring that everyone is committed to abiding by these policies and that they clearly understand their rights and responsibilities with regard to the project.

Internal communication

Developing effective systems of communication within the garden group is essential to maintain a spirit of inclusiveness and ensure that everyone's voice is heard. Some of the methods that other gardens have developed for communicating amongst themselves may prove useful to your project:

- Letterboxes at each plot;
- Newsletters and/or an email discussion list;
- Noticeboards or blackboards for listing events, news and task lists;
- A logbook or garden diary that volunteers fill it in when they visit, noting what they did and anything out of the ordinary that they observed; and
- Regular meetings.

Community building

Internal communication will be vastly improved if a little effort is put into developing a sense of community within the group.

Community building can be facilitated by organising a range of events that involve:

- Socialising together – any opportunity to get to know each other, share ideas, chat and build friendships;
- Celebrating together – seasonal festivals, birthdays or simply the group's achievements thus far. Incorporate music wherever possible;



Well-designed community gardens encourage social interaction



Productive gardens can provide healthy food for their communities

- Cooking and eating together – BBQs, shared picnics, morning teas, harvest feasts, shared produce; and
- Working together – regular working bees as well as one-off projects.



Big jobs get done more quickly when you work as a team

Remember that a community is made up of a variety of unique individuals who do not always agree or hold the same values. This can be frustrating at times but also provides a wealth of opportunities for sharing skills, experience and knowledge. If you value equally the needs of all members and provide a framework where everyone's voice can be heard, you will find that diversity is a great asset, enriching the community garden and everyone who is involved.

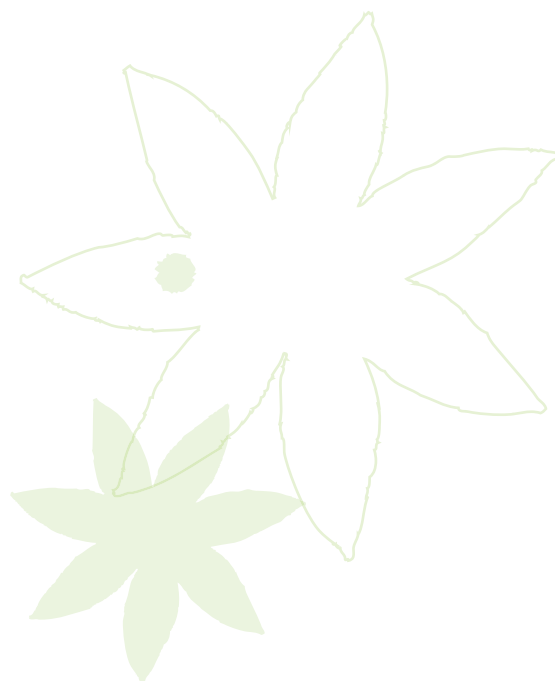
Governance

A core group, ideally with a range of skills and experience, should be gathered to form the garden management committee. This group of between five and ten people work collaboratively to keep the project on track and ensure that responsibility does not rest unduly upon the shoulders of one or two people. Be strategic and invite people to sit on your committee who have the leadership skills to take the project forward.

Effective committees:

- Work in support of the garden's aims, objectives, and vision;
- Include representation from a range of stakeholders;
- Are well informed about the workings and goings-on of the garden;
- Have good support from the community garden as a whole;
- Target key people with key interests, skills and networks to fill roles;
- Rely on agreed meeting and decision-making procedures;
- Have friendly, efficient, well facilitated meetings;
- Provide training and/or mentoring for committee members; and
- Have effective communication between committee and gardeners.

Adapted from the Community Gardening in South Australia Resource Kit



The management committee may in time wish to apply to the NSW Office of Fair Trading to become an incorporated association. This will afford the group greater flexibility in obtaining and administering funds as well as allowing them to take greater ownership of management decisions. It will also require a greater level of internal organisation and administration

Code of conduct

A code of conduct defines what is, and is not, acceptable behaviour within the community garden. In some gardens the code of conduct has been an important tool for resolving conflict where one or more members are causing difficulty due to their differing and inflexible objectives. A code of conduct is prescriptive, so keep it brief and avoid creating too many rules and regulations.

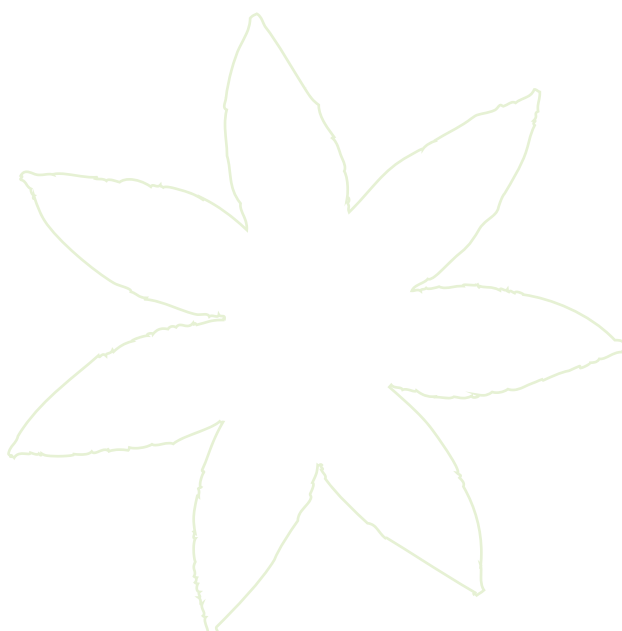
Constitution

In contrast to a code of conduct, a constitution is a longer and more formal document with legal status. It is a requirement for community gardens that have decided to become incorporated associations and is also useful for any garden group that has begun to develop more complex projects and procedures as it formalises the fundamental principles and tenants that the group abide by.

Conflict resolution

Although community gardens generally aim to promote an environment that is tolerant and inclusive, it is inevitable that conflict will sometimes arise, either within the garden group or with external stakeholders.

Developing a clear process for the resolution of conflict is therefore essential. Many community gardens have learnt this the hard way.



Honestly and openly address the potential of conflict as a group and discuss what you will do when it arises. Your conflict resolution process should look at:

- Ensuring respectful communication between those involved;
- Who, both internally and externally, will mediate serious conflict; and
- What will be the process for addressing personal grievance.

Project evaluation

Now and then it is important to sit down as a group and look at your project to assess whether or not you are achieving what you set out to achieve. Evaluation helps you see how far you've come, can show you where potential sources of conflict lie and is also useful as a means of leveraging funding and publicity for your project.

- What are we trying to do here? Does it work?
- Is this what we set out to achieve?
- What is its value?
- What has this achieved?
- Has this been successful?
- Why does it work?
- Why doesn't it work?
- What can we do to make it work better?
- What has been the short to medium term impact of our work?
- What has been the longer term outcome of our work?

Adapted from the Community Gardening in
South Australia Resource Kit



Community partnerships

A community is a network, a social ecology, and community gardens are very good at building this network through the development of collaborative and mutually beneficial partnerships.

Community outreach

There are many ways to let the community know about and get involved in your project. Some promotional activities to try include:

- Onsite signage – clear, welcoming and attractive, explaining what the garden is about, when it's open and contact details;
- A brochure – detailing the project vision and how people can get involved. Ensure it's distributed widely within your local area;
- T-shirts or hats – to wear in the garden and at events;
- Community events and celebrations – these can give you coverage in the local media and showcase the success of your project;
- A website – Website space is available to promote your community garden and tell people about how it works at www.communitygarden.org.au. You should also list your garden at www.communityfoods.org.au;
- An information stall – for community festivals and market days; and
- A publicity officer – someone with publicity or marketing skills is ideal.



Interpretive signage creates opportunities for incidental learning by garden visitors

Vandalism

Encouraging involvement and a sense of ownership within the local community will minimise problems of vandalism. Welcome and engage those who might be potential vandals and actively avoid excluding anyone; even non-gardeners can still enjoy the space for relaxation or social interaction. The following hints may also prove useful:

- Provide supportive neighbours with phone numbers they can call if they see something suspicious;
- Ensure garden signage lets people know that the garden has been developed for and by the community;
- Liaise with schools and youth groups to develop activities in the garden that children and young people will enjoy; and
- Use spiky plants and vines on walls and fences that invite graffiti, or invite local artists to develop murals, aerosol art and mosaics.

Adapted from the Community Gardening in South Australia Resource Kit



Nature and aerosol art can blend harmoniously in a community garden

Links with other organisations and networks

Initially, developing links with other community gardens and community garden networks is an important means of increasing your skills, as well as your access to funding and resources. As your garden develops, its value as a demonstration of sustainable living will increase; other organisations may use it as a site for field trips, practical activities or workshops. Opportunities will arise to form collaborate projects with groups such as youth centres, schools and universities.



Community gardens are a valuable educational resource for local schools

Employment programs

Many community gardens develop work-skills programs for the unemployed that provide significant energy and input into the garden project while building confidence, skills and motivation in participants. Such programs are most effective when there is a particular project the group can take ownership of, such as building a pergola, and are particularly appropriate at the project outset.

Participants of such programs need to be afforded the same respect and opportunities provided to other volunteers. Encourage them to give input, take on responsibility and participate in training, social events and decision-making.

Community gardens participating in such programs need to be aware that there are administrative, coordination and financial responsibilities involved. Talk to other garden groups that have already undertaken similar programs to get advice and assistance in developing your own program.



Technical skills are easier to learn on the ground than in the classroom

Essential Resources

The following resources cover all aspects of developing and managing community gardens, including occupational health and safety, volunteering, organic gardening, designing education programs and working with Council and the community.

Guidelines

- **Community Gardening in South Australia Resource Kit**
www.canh.asn.au/community_gardening/ - includes a range of factsheets
- **Cultivating Communities' Good Practice Guide**
www.communitybuilders.nsw.gov.au/building_stronger/safer/commgard.html
- **Northey Street City Farm's New Farmers Training Manual**
7d8ca58ce9d1641c9251f63b606b91782998fa39.gripelements.com/docs/New_Farmers_Training_Manual.pdf

Networks

- **Australian City Farms and Community Gardens Network**
www.communitygarden.org.au - great newsletter, website and email discussion group. ACFCGN also organises local get-togethers for community gardeners
- **Australian Community Foods**
www.communityfoods.org.au - register of Australian community gardens
- **The American Community Gardening Association**
www.communitygarden.org - a wealth of resources, links and publications
- **Cultivating Community**
<http://cultivatingcommunity.org.au/cc/> - a key player in the Victorian network that contracts its services to the Victorian government.

Best practice examples

- Northey Street City Farm
www.northeastcityfarm.org.au
- CERES Environment Park
www.ceres.org.au

Books

- Community Gardens,
Woodward, P and Vardy, P (2005), Hyland House, VIC
- Introduction to Permaculture,
Mollison, Bill (2000), Tagari Press, NSW
- Handbook of Community Gardening (1982),
Susan Naimark , Boston Urban Gardeners
- Harvest of the Suburbs (2006),
Andre Gaynor University of Western Australia Press, Crawley.
- Permaculture, Principles & Pathways Beyond Sustainability (2002),
David Holmgren, Hepburn.
- Earth Users Guide to Permaculture (2006),
Rosemary Morrow, Kangaroo Press, Sydney.

Glossary

Biodiversity:

The abundance and variety of all living things on Earth including plants, animals, insects, micro-organisms and human beings.

Biomass:

Organic material, both living and no longer living, in a specific environment.

Charter:

A statement setting out an organisation's purpose, mission, values and goals.

Code of conduct:

A document designed to guide the behaviour of an organisation's members.

Consensus decision-making:

A group decision-making process that requires the agreement of most, if not all, members. The process also involves the resolution of objections to the decision.

Constitution:

An official document setting out the rules and principles governing management of an organisation. It is required of all organisations seeking to become incorporated associations.

Contour:

An imaginary line on the surface of the earth, or drawn on a topographic map, connecting points of the same elevation above sea level.

Experiential learning:

Learning through doing; a participatory approach to learning.

Incorporated association:

A legal entity with certain rights and responsibilities under Australian law. It allows an organisation to do such things as sign a lease or obtain insurance without risk to individual members.

Integrated pest management:

Designed pest management using a range of complementary methods including planting habitat for natural predators, using pest-resistant varieties and changing cultural practices. Pesticides (even natural ones) are used only as a last resort.

Integrated soil fertility management:

In this context it refers to designing your garden to provide the nutrients and biomass required for sustainable soil fertility management from on-site sources.

Learnscape:

An environment or landscape designed for learning.

Management committee:

An elected group comprising a president, vice president, treasurer, secretary and public officer, as well as several ordinary members. Establishment of a management committee is required of organisations seeking to become incorporated associations.

Operations manual:

The agreed procedures and practices for maintaining the community garden and its assets.

Passive irrigation:

In this context, making the most of rainwater that naturally falls on the site.

Permaculture design:

The use of ecological principles as the basis for designing sustainable systems of food production, housing, appropriate technology and community development.

Plan of management:

A detailed document outlining exactly what the group hopes to achieve and how it intends to do so.

Public liability insurance:

Insurance to cover the cost of accidental injury or property damage to garden visitors. It protects the organisation if a member of the public sues them for negligence.

Risk assessment:

A formal process of identifying health and safety risks, assessing how likely and how serious these risks are and developing ways to avoid them occurring.

Swale:

In this context a man-made depression along the contour designed to prevent rainwater running off the site. It is useful to increase passive irrigation and to avoid stormwater pollution.

Water sensitive urban design:

Designing to increase rainwater and stormwater harvesting options, maximise water reuse and minimise the impacts of stormwater on urban waterways.

Appendices

1. Cultivating Community's Community Gardens Rules and Guidelines

Cultivating Community is funded by the Victorian Department of Human Services (Office of Housing) to manage a series of community gardens in Melbourne. They have a focus on environmental sustainability and community participation.

1. Who Can Have A Plot?

Public housing tenants living on the estate where the garden is located are eligible for a plot. Only one garden plot is available to each household. Preference will be given to tenants who do not have their own private garden. Other individuals or organisations may also be eligible for a garden plot at the discretion of the Community Garden Support Worker.

2. Fees

There is an annual fee required for a garden plot. This fee will be collected by Cultivating Community staff once a year, in the garden and will be used for garden supplies, maintenance, social gatherings for the gardeners and other costs as determined collaboratively by the gardeners and the Garden Support Worker.

3. Applying For A Garden Plot

Tenants wishing to apply for a garden plot must complete and sign an application form/contract. They must read or have read for them the Community Gardens Rules and Guidelines. Cultivating Community may check with the Office of Housing to make sure that any person applying is eligible for a garden plot.

4. Management

Cultivating Community has a contract with the Office of Housing to manage the Community Gardens. Therefore, the responsibility and authority for managing the gardens rests with Cultivating Community. Cultivating Community will work with gardeners to establish on going tenant management arrangements.

5. Allocation Of Plots

If no plots are available at the time of applying, the applicants name will go on a waiting list and they will be advised when a plot becomes available. Allocation of plots will be based on:

- date of application
- physical needs of the applicant
- type of plants that the applicant wishes to grow

6. Keys

All gardeners will be provided with a key to the garden at the time of plot allocation. Gardeners must not give their key to another person without the permission of Cultivating Community. If a gardener loses their key, they need to inform the Community Garden Support Worker and pay for a replacement.

7. Forfeiture Of Garden Plots

Plots are allocated to the person or persons named in the Community Garden contract. Plots are not transferable without the permission of Cultivating Community. Gardeners cannot give their plot to another person. If a gardener no longer wishes to maintain their plot or moves from the public housing estate, they must advise Cultivating Community and return their Community Garden key to them. The plot will be reallocated to someone who is on the waiting list. From time to time Cultivating Community will check gardeners' ongoing eligibility with the Office of Housing.

8. Plot Ownership

Each gardener is entitled to one plot. If there are vacant plots they may become available to gardeners if no waiting list exists. Gardeners must apply to the Community Garden Support Worker if they wish to have an additional plot. However, when a tenant is added to the waiting list they will be given priority and therefore gardeners with additional plots will be asked to hand back those additional plots at the end of the season with adequate notice.

9. Responsibilities Of Gardeners For Their Own Plots

9.1 General maintenance of plots

Gardeners are responsible for the care and maintenance of their individual plots throughout the year, even during the winter months. It is the responsibility of gardeners to maintain their plot and the area around their plot, keeping it free of weeds, rubbish and any items that may be obstructing the pathways. Mulching of garden plots is strongly encouraged to control weed growth.

If a gardener is unable to tend a plot, temporarily leaves the estate due to illness or for the purposes of travel, work or emergency, for two months or more, they must discuss their situation with a Cultivating Community Support Worker.

9.2. Climbing plants

Gardeners should use stakes for climbing plants, such as tomatoes and beans. If gardeners wish to store stakes when not in use, they should be bundled at one end of the garden plot without obstructing pathways.

9.3. Plot boundary fences

Gardeners who want a boundary fence around their garden plot may do so using wire mesh to a height of no more than one (1) metre.

9.4. Building and other materials

Permanent structures must not be built on garden plots or on vacant areas of the Community Garden. Gardeners cannot use the Community Garden to store building or other materials.

9.5. Additional planting space

Gardeners who want planting space in addition to their allocated plot i.e.: polystyrene boxes, planter boxes and containers, must seek permission to do so from the Community Garden Support Worker. Each community garden has restrictions on the number of polystyrene boxes permitted depending on space and safety issues in the garden. Once permission is granted gardeners are asked to put their plot number on their boxes so that they can be identified. Those gardeners exceeding the permitted number will be asked to remove their boxes from the garden.

9.6. Types of plants

Community Garden plots are for growing herbs, flowers and vegetables. Trees and large permanent shrubs are not suitable for garden plots because they may block sun to other plots. However, it may be possible to allocate a plot that does not shade or affect nearby plots. Gardeners who wish to grow large plants must advise Cultivating Community before plots are allocated.

9.7. Soil

Gardeners are responsible for improving the condition of the soil in their plot. It is important that nutrients are put back into the soil after every season as plants use up the nutrients in the soil as they grow. This can be done by adding manure, compost and mulch.

When a gardener hands back (forfeits) their plot, under no circumstances are they are permitted to remove any soil from their plot.

10. General Conduct In The Garden

Gardeners and visitors should respect the gardens as community spaces. Gardeners and visitors must not remove any plants or equipment from another gardener's plot without the gardener's permission. Likewise, plants and equipment must not be removed from other areas in the Community Gardens without the approval of Cultivating Community. Wilful damage to any area of the Community Gardens will not be tolerated. Each gardener has the right to quiet enjoyment of the Community Garden. Threats or abuse of any form will not be tolerated. The consumption of alcohol or any form of substance abuse will not be tolerated in the garden. Gardeners are not permitted to enter the garden under the influence of alcohol.

11. Dealing With Problems Or Concerns In The Community Garden

Dealing with garden related issues is the responsibility of Cultivating Community. If gardeners have any concerns about the garden or about other gardeners they are strongly encouraged to contact Cultivating Community on this number- (03)94156580. Cultivating Community will deal with such matters efficiently and in a fair and reasonable manner.

12. Maintenance Of Common Garden Beds And Public Areas

All gardeners are expected to take responsibility for the care, maintenance and development of common garden beds and public areas in the Community Gardens. Cultivating Community encourages 'active gardening' in the Community Gardens. This includes:

- Removing weeds along the border of garden plots and pathways adjacent to garden beds.
- Sweeping pathways.
- Picking up and disposing of any rubbish around the garden.

Participating in at least one (1) Working Bee / Clean up the Garden Day per year. This does not necessarily mean heavy labour. There are many simple ways of contributing to the communal nature of the gardens. The Community Garden Support worker will inform gardeners of the dates of these Working Bees/Clean Up days.

13. Waste Management

There are compost bins and worm farms in some of the Community Gardens and all gardeners are strongly encouraged to use them as a means of reducing kitchen waste, e.g. fruit and vegetable scraps, egg shells, leftover rice, noodles etc.. These recycling systems help to reduce household waste, and support the production of good compost for use in garden plots. Gardeners are encouraged to contact the Community Garden Support Worker if they need advice about using the compost facilities.

Gardeners are encouraged to place any suitable waste plant matter in the large composting bins/worm farms. Wood, plastic bags, tin cans or polystyrene foam boxes should not be added to the compost. Only waste that can easily decompose should be placed in the compost/worm farm. All other rubbish must be put in the rubbish bins provided. Gardeners are encouraged to chop up or break up any plant matter into small pieces, as this will assist in the composting process. Do not put meat, fish or chicken in the worm farms or compost bins.

14. Water Management

All gardeners are required to adhere to the guidelines for water use outlined by Cultivating Community. These guidelines were issued in January 2002 to gardeners and are also displayed in the garden. All gardeners are asked to avoid wasting water in the garden. Hoses should be hand held and should not be left running unattended. The use of watering cans is strongly encouraged.

15. Control Of Garden Pests

No toxic chemicals for pests and weeds are to be used in the Community Gardens. Gardeners can use safe, environmentally friendly products such as garlic or rhubarb sprays.

16. Garden Tools

Gardeners must provide their own tools, eg, hand trowels. Where there is a shed, larger Community Garden tools will be kept securely locked in the shed. These tools are for the communal use of the gardeners and to be used only in the Community Garden.

Garden brooms are available for gardeners to sweep pathways. Garden hoses must remain connected to the tap and contained so that they do not lie across pathways.

If any garden equipment is missing, gardeners should report this to Cultivating Community as soon as possible.

17. Change In Circumstances

Gardeners must advise Cultivating Community of:

- any change in their address or telephone number.
- if they are no longer eligible to keep their plot.
- if they are unable to tend their plot for two (2) months or more.

18. Other Matters

18.1. Animals

Dogs, cats and other pets must not be brought into the Community Gardens.

18.2. Garden security

Gardeners must close and lock the garden gate when they (enter or) exit the garden.

Gardeners must lock the shed if it is not in use and when they exit the garden.

18.3. Visitors to the Community Gardens

All visitors to the Community Gardens are the responsibility of the gardener who has invited them into the garden.

18.4. Children in the Community Gardens

Children are welcome in the Community Gardens. Adults must supervise children at all times.

18.5. Sale of Garden Produce

Garden plots are available for personal use only. Gardeners are not permitted to sell plants that have been grown in the Community Garden. The use of garden plots for growing plants commercially is not permitted unless it is an Office of Housing approved project.

2. Collingwood Children's Farm Gardener Responsibilities

Before beginning to work a plot eligible gardeners are required to read the "Rules and Guidelines" and sign a "Community Garden" contract. Community Gardeners at the Collingwood Children's Farm are required to:

1. Pay an annual fee

The Annual Membership Fee is \$50 (full) \$25 (conc) for a 6m x 4m plot (the old double sized plots are \$100 (full) \$50 (conc)). Collingwood Children's Farm collects the fee that is used for water, garden supplies, and garden maintenance. Payment can be made by cheque, through the post or directly to our reception – open from 9am to 5pm every day of the year.

2. Help look after the garden's communal facilities by:

- Attending three working bees a year. Monthly working bees on the third Saturday of every month (1pm – 4pm) enable gardeners to take responsibility for the care, maintenance and development of the communal areas within the Community Gardens and provide opportunities for sharing culture, knowledge and skills.

3. Support the Farm by:

- Contributing to two farm fundraising events a year. The Farm runs a regular program of fundraising events that include monthly family days, night music events in the barn, seasonal events such as the winter solstice bonfire and the Country Fair. We rely on the support of volunteers to run these events successfully. Contributions can include helping with food preparation and serving, staffing stalls, washing dishes, cooking cakes and salads, helping set up and pack up etc.
- Becoming a farm member. Gardeners are encouraged to take out a Farm membership – this is currently \$15 a year. It supports the Farm and you will receive our seasonal newsletter that has excellent information on gardening and general Farm events.

4. Abide by the rules and guidelines

- Use your plot intensively over the whole year. There is a very long waiting list!
- Maintain weed-free pathways of one metre in width around your garden plot.
- Take all your rubbish home – if you carry it in you can carry it out!
- If you move house or are going to be absent for a period of longer than three months, the community garden worker must be notified.
- Minimise water use by watering less frequently and more deeply and by mulching over summer.
- Avoid using any chemicals or pesticides – strictly organic practices apply.
- Keep the gate locked at all times before 9am and after 5.30pm

3. Veg Out Vows

The Veg Out Vows were written in a sense of fun but with the important purpose of providing the diverse people involved with some common principles to operate under.

- 1 I pledge not to interfere with the rights and opportunities of others at Veg Out.
- 2 The only conflict initiated by me will be with weeds and pests, which I will attack with biological means rather than chemical.
- 3 If a dispute does arise, I pledge to settle it through calm discussion and goodwill according to the grievance procedures of Veg Out. If the issue remains unresolved, I will accept the decision of the Veg Out Committee.
- 4 I understand that my involvement at Veg Out and the opportunity to use my garden is a privilege, not a right, and as such I must use it or lose it.
- 5 When I use tools (where and when I swing them or leave them) I will always be aware of the safety of myself and others.
- 6 I understand my participation at Veg Out is at my own risk. The City of Port Phillip, and members of the Veg Out Committee, are not liable for any injury to me, or to my invited family and friends, nor for the loss of any of my possessions.
- 7 I appreciate the need for security of the Garden and the Artists' studio spaces and will lock the gate each time I exit through it.
- 8 I understand that if I do not pay my plot fees (as set by the Committee) on time I will forfeit my right to use the plot.
- 9 I will contribute at least one hour per month to general site maintenance and I happily agree to share what I can with the garden community.
- 10 I have read, appreciated and will abide by the spirit of the Veg Out Charter, with the best of intentions for the greater good.

Veg Out Charter

To create a unique, safe and supportive haven within the City of Port Phillip for all citizens. To promote a sense of community where trust, effort, knowledge, skills and responsibility are shared; where creativity, quality and the environment are nurtured; and where equity and philanthropy can flourish.

4. Community Gardening in SA Volunteer Induction Outline

All new volunteers should participate in an induction and orientation session before they start working on site. This can be done one person at a time, but it is preferable to hold inductions with small groups of new volunteers. It is recommended that this session be followed by a Garden Safety session.

Time

2hrs 15mins (plus 40 mins Garden Safety)

Outcomes

New volunteers:

- Know their way around the garden
- Have a basic understanding of the aims and activities of the garden
- Have met some of the other garden volunteers/ workers
- Know about what volunteer activities they can participate in and when and where they can start

Materials

- Butchers paper / blackboard
- Pens / chalk
- Extra sun hats and/or sunscreen
- Morning tea, water
- Optional handouts: leaflets about the garden, volunteer policy documents, OHS procedures, volunteer handbook. You might put together them together as a new volunteers' kit. You could also include a set of Basic Gardening Leaflets.

Participants' requirements

A hat, water bottle, shoes suitable for site tour

Introductions / prior knowledge - 20 minutes

- Invite each person in the group to say their name, one of their reasons for volunteering at the garden, and something they know about the garden. Ask people to be brief in their answers. Tell people you will write the things they say about the garden on butcher's paper.
- Outline the program for the morning, make sure people know where toilets and water are, and allow opportunity for questions.

Icebreaker: have you ever...? (optional) - 10 minutes

Arrange chairs (or cushions) in a circle so there is one for each participant, excluding the facilitator. The facilitator stands in the centre of the circle and completes the question 'Have you ever...?' Everyone who has must get up and switch chairs. They cannot return to the chair they left or the ones next to it. The person left without a chair must ask the question again. You might choose a specific focus for the questions (e.g. gardening: have you ever made compost in the rain, have you ever planted broccoli) or to leave it open to what ever people what to know about each other...

Site Tour - 1 hour

Plan a trail around the garden that will enable you to talk about various garden features and activities that take place. Design your route to do most of your talking in shady areas.

Before beginning, offer spare hats and/ or sunscreen. Ask what people are particularly interested in seeing or finding out more about the garden, and if possible tailor the tour to address these.

Show people where tools, etc they may need to use are kept, and any protocols for cleaning and putting away tools.

Invite and be prepared to answer questions as you go.

Morning tea - 30 minutes

Share morning tea with other volunteers, supervisors, and workers at the garden. Personally introduce new volunteers to people they will be supervised by or working closely with.

Introduce the garden and volunteering opportunities - 15 minutes

Share stories of the garden, drawing on what was written on the butcher's paper during introductions. You might include the garden's history, organisational structure, aims and values, what happens there, where it's headed, and how people can become members and become involved in decision making.

Outline the ways in which people can get involved, the range of volunteer activities available), regular working times, training opportunities – if appropriate have timetables and signup sheets for particular projects or working groups. Ensure everyone has filled in a volunteer's registration form.

Allow time for questions.

You may have leaflets or other appropriate materials to hand out at the end of this session.

Adapted from the Community gardening in South Australia Resource Kit

5. Community Gardening in SA Garden Safety Induction Outline

This workshop should be tailored to address the particular hazards of your garden and to cover the activities people are likely to undertake.

Time

40 minutes if following a Volunteer Induction, 1 hour if stand alone session.

Outcomes:

- Participants understand potential garden hazards and how to reduce risk
- Understand their responsibility for garden safety
- Are familiar with garden protocols and can identify contact persons

Materials/equipment:

Handouts

Introduction

Introduce the facilitator, venue, and session.

Introduction / icebreaker if running as a stand alone session.

Introduce the garden's protocols and contact people, such as first aid officer, accident reporting, location and use of first aid box.

Safety brainstorm

Invite people to share their understanding of what makes a safe garden. Emphasise that everyone is responsible for their own safety and the safety of others.

Hazard assessment

If you have just been on a site tour, ask participants to identify potential hazards that they saw. If you are not following an induction session, take a brief tour of the garden, identifying potential hazards as you go. Discuss ways to minimise the risk of each hazard.

Tool safety

Introduce tools frequently used at the garden (wheelbarrows, shovels, saws, hoses and so on) Discuss potential hazards of use/ misuse for each.

Ask a participant to demonstrate what they see as the safest ways to use each tool, including carrying, using, putting down temporarily while using, and storing. Discuss.

Conclusion

Distribute handouts and ask for feedback on session.

Adapted from the Community gardening in South Australia Resource Kit



6. Raymond Terrace Community Garden Volunteer Induction Procedure

- Tour the garden with the volunteer and discuss the aims of the project. Make special mention of worm farm, compost bays, integrated pest management etc.
- Ask the volunteer whether they want to take on a specific role or just attend working bees
- Show volunteer around the Tool Shed and discuss care of community garden tools and equipment
- Show volunteer kitchen and bathroom facilities – discuss the clean up rule
- Show volunteer the library and other resources and discuss borrowing policies
- Discuss and explain the garden site plan
- OHS induction
 - Volunteers are shown the Garden Risk Assessment and are provided with Community Garden Safety Booklet. The Safety Booklet contains the same information as the Risk Assessment, which is then briefly discussed
 - Discuss Personal Protective Equipment (PPE) – i.e. gloves, covered shoes, broad-brimmed hat, covered shoulders, long pants, dust masks. Appropriate PPE must be worn at all times
 - Discuss the use of Risk Assessments for new tasks and dangerous activities (eg. use of power tools)
 - Discuss Insurance cover and Volunteer Sign-on Procedure
 - Discuss accident procedure and Incident Report Book
 - Discuss First Aid Kit
 - Show volunteer through cupboard where PPE, Incident Report Book and First Aid Kit are stored
- Have volunteer fill out Volunteer Registration form and Prohibited Employment Declaration, carefully explaining the purpose of each
- Provide volunteer with a Volunteer Information Kit if they don't already have one
- Thank volunteer for their time and ask when they will be next visiting the garden. Try to make a time for them to come and work with you, or if this is not possible with another long-term garden volunteer

7. Raymond Terrace Community Garden Risk Assessment

Class of Risk Key:

Risk of death, severe injury and/or hospitalisation - A

Risk of moderate injury - B

Risk of minor injury - C

Specific Task	Potential Hazards and/or Consequences	Class of Risk	Control Measures
Operation of minor plant and hand tools (e.g. hand drill, whipper-snipper, mower)	<ul style="list-style-type: none"> Faulty equipment Incorrect use Intrusion of public onto worksite 	B	<ul style="list-style-type: none"> Conduct daily pre-use inspection Ensure you have pre-use instruction & training Barricade the area Wear appropriate PPE
	<ul style="list-style-type: none"> Crushing of feet 	B	<ul style="list-style-type: none"> Wear safety footwear – steel caps
	<ul style="list-style-type: none"> Noise exposure 	B	<ul style="list-style-type: none"> Wear hearing protection when plant operating on site
	<ul style="list-style-type: none"> Laceration to feet and lower legs 	C	<ul style="list-style-type: none"> Wear safety footwear and long trousers where required
	<ul style="list-style-type: none"> Eye injury caused by flying debris 	B	<ul style="list-style-type: none"> Eye protection must be worn, including full face guards when necessary
	<ul style="list-style-type: none"> Incorrect manual handling 	B	<ul style="list-style-type: none"> Use proper manual handling techniques Plan lift – use two person lift, wheelbarrow or trolley. Limit the amount of time you are engaged on one activity through job rotation
	<ul style="list-style-type: none"> Electrocution 	A	<ul style="list-style-type: none"> Conduct daily pre-use inspection of equipment and leads All equipment (including hire equipment) must be tagged within the last three months Ensure all machine guards are in place and fit for the purpose Ensure earth leakage protection is in place
General landscaping and garden maintenance work	<ul style="list-style-type: none"> Slips and falls – especially due to uneven, soft and loose ground 	B	<ul style="list-style-type: none"> All access routes must be kept clear of materials and debris All spills to be cleared immediately All electrical leads to be kept clear of work areas, and securely supported away from risks of damage All situations to be assessed carefully before action is taken Wear appropriate footwear at all times

Specific Task	Potential Hazards and/or Consequences	Class of Risk	Control Measures
Outside work – exposure to weather	<ul style="list-style-type: none"> • Sunburn • Heat Stroke • Wind blown particles 	C	<ul style="list-style-type: none"> • Wear suitable clothing, broad brimmed hat and sunscreen • Wear appropriate PPE • Drinking adequate liquids • In hot weather consider starting and finishing earlier to avoid hottest part of day • Rotate tasks to shaded areas
Working near roads and/or traffic	<ul style="list-style-type: none"> • Injury due to being hit by a vehicle 	A	<ul style="list-style-type: none"> • Due care should be taken at all times – look for traffic before crossing • High visibility safety garments should be worn when working near moving vehicles, roads and car parks
Riparian revegetation work	<ul style="list-style-type: none"> • Snake bites 	B	<ul style="list-style-type: none"> • Wear safety boots and long pants • Position first aid kit within easy access on site and ensure supervisor is a trained first aider • Ensure participants you are aware of how to manage snake bites • Avoid working in areas of long grass or dense shrubbery • Leave snakes alone • Phones must be accessible
	<ul style="list-style-type: none"> • Mosquito, spider, leach, wasp and tick bites 	C	<ul style="list-style-type: none"> • Wear long sleeved shirts and long pants • Avoid working in areas where insects are virulent, eg. swampy areas • A product to relieve itching is in first aid kit
	<ul style="list-style-type: none"> • Scratches and lacerations from thorny weeds 	C	<ul style="list-style-type: none"> • Wear safety boots, long pants and long sleeved shirt • Ensure gloves are worn at all times • Provide antiseptic lotion in first aid kit
Working near water courses	<ul style="list-style-type: none"> • Drowning due to accidentally slipping into water 	A	<ul style="list-style-type: none"> • Always work in pairs • Ensure you are able to swim if working around water • Ensure supervisor is able to perform CPR and is qualified with a current Senior First Aid Certificate
	<ul style="list-style-type: none"> • Puncture wounds from submerged sticks or other objects 	C	<ul style="list-style-type: none"> • Wear safety boots even when in shallow water • Wear long pants • Ensure first aid kit is accessible

Specific Task	Potential Hazards and/or Consequences	Class of Risk	Control Measures
Working with composts and soils	<ul style="list-style-type: none"> Inhalation of microbes and dust 	C	<ul style="list-style-type: none"> Wear dust mask if material is very fine or dry, or if conditions are windy Use disposable latex gloves
Miscellaneous	<ul style="list-style-type: none"> Needle-stick injuries 	A	<ul style="list-style-type: none"> Dispose of used sharps (hypodermic needles) in the container located in first aid kit Ensure you wear appropriate PPE (including leather gloves, long pants and safety boots) Be aware of your surroundings and don't put any part of your body wear you cannot see clearly

8. Raymond Terrace Community Garden Garden Safety Booklet

What is Occupational Health and Safety?

The Occupational Health and Safety Act became law in 2000 and is a means of ensuring that employees and volunteers are guaranteed safe and healthy work conditions at all times.

Community Garden OH&S Policy

At the Raymond Terrace Community Garden we are committed to the health and safety of all volunteers and visitors to the garden.

All new volunteers at the Raymond Terrace Community Garden will be given a Health and Safety Induction. This is a short talk to ensure that everyone is aware of the hazards associated with working in a garden environment.

Responsibilities of the Community Garden

The Raymond Terrace Community Garden must ensure the health, safety and welfare at work of all employees and volunteers. This includes:

- Ensuring all premises are safe and without risk to health
- Ensuring that any equipment or substance provided for use is safe and without risk to health when properly used
- Ensuring that the working environment is safe and without risk to health
- Providing information, instruction, training and supervision to ensure health and safety at work
- Providing adequate facilities for the welfare of the employees and volunteers at work

Responsibilities of Volunteers

Employees and volunteers of the Raymond Terrace Community garden have the following responsibilities:

- To take reasonable care for the health and safety of themselves and the people they work with
- To cooperate with their colleagues and supervisor in the interest of the health, safety and welfare of everyone at the workplace
- Not intentionally or recklessly interfere with or misuse anything provided in the interest of health, safety and welfare.

Identifying Hazards

Hazards are everywhere around us. Before commencing a task it is a good idea to carefully assess the situation for possible risks to health and safety.

Things you should take into account when assessing risks include:

- Your immediate environment
- The materials you are working with
- The tools and equipment you are using
- Your own health and wellbeing

Examples of hazards in the garden environment include excessive sun exposure, insect bites, injury from use of tools, inhalation of spores in soil and back strain from inappropriate lifting techniques.

The Cost of Failure

If hazards are ignored or not properly assessed and as a result an accident occurs this can impact not just on yourself but also on the people around you including:

- Other volunteers and employees
- Visitors and members of the public
- Clients of the Youth Café

Impacts could include:

- Serious injury to yourself and others
- Prosecution, fines and imprisonment
- Claims for damages against you
- Replacement costs
- Temporary or permanent closure of the project

Working Safely

No matter how careful we are, accidents still sometimes occur. We can minimise the risk of accidents by:

- Following OH&S guidelines
- Applying commonsense
- Being aware of others and of the hazards around us
- Wearing appropriate Personal Protective Equipment
- Cooperating with supervisors and more experienced volunteers
- Reporting problems such as damaged tools
- Working in a safe and responsible manner

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is provided for your own health and safety. Please wear the appropriate PPE at all times, depending on the tasks you are undertaking.

Personal Protective Equipment provided at the Raymond Terrace Community garden include:

- Leather gloves
- Ear muffs
- Dust masks
- Sunscreen

Please let us know if these become worn out so that they can be replaced

There is some Personal Protective Equipment that you are required to provide for yourself. This includes:

- Long trousers (to be worn when mowing or whipper snipping)
- A broad-brimmed hat for sunny days
- A shirt with covered shoulders
- Covered shoes. These must be worn at all times when working in the garden

Please see the garden supervisor if you have trouble providing these items.

Manual Handling

Severe injury can be sustained through the simple act of lifting or carrying heavy loads in the wrong way. To avoid such accidents occurring, please follow these guidelines:

- Be aware of your limitations. If in doubt ask someone for help
- Plan the lift. If necessary use a trolley or wheelbarrow
- Ensure the work area and pathway is free of slipping and tripping hazards
- Check the load for sharp edges. Wear protective clothing if necessary as well as gloves and covered shoes
- Ensure you have a stable footing that allows for even distribution of weight. The front foot should be beside the object, pointing in the direction of travel. The back foot should be slightly behind and hip width from the front foot
- Ensure you have a secure hold of the object before lifting
- Bend from the knees to get down to the level of the load and use the legs to lift
- Keep your back straight!
- Keep the head raised – this ensures your spine remains straight and you can see where you are going
- Keep arms as close to the body as possible
- Don't change your grip while carrying and directly face the spot where the load will eventually rest

Working with Soils and Compost

Soils, mulches and composts all contain particulates, fungal spores and bacteria that can damage your lungs and/or carry disease.

When working with these substances it is important to avoid inhaling the dust. A dust mask should be worn to avoid any risk to your health.

Using Hand Tools

Hand Tools such as mattocks, shovels and rakes should be used with care and attention.

- Check that tools are in good repair before using
- Use tools only for the purpose they were intended
- Be aware of where other volunteers are working
- Always wear appropriate PPE, especially strong, covered shoes or boots
- Report any damaged tools immediately

Working in Traffic

From time to time you may be required to work in areas where there is light traffic. During these times you should:

- Remain aware of your surroundings
- Wear a brightly coloured Safety Vest. These are stored in the shed

Working on the Riverbank

When working on the riverbank there is a slight risk that you might slip and fall into the water. During these times:

- Try to always work with a companion, especially if you are not a strong swimmer
- Work carefully and sensibly
- Be aware of the risk of submerged objects, including discarded hypodermic needles
- Be aware if there are young children nearby

Avoid working on the riverbank when there is a strong current, i.e. after heavy rain.

Sun Sense

The risk of sunburn and sunstroke, with the resulting possibility of developing melanomas and other skin cancers, is probably the most common risk associated with outdoor activity. It is probably also the most ignored. While working in the Raymond Terrace Community Garden please observe the following:

- Regularly apply sunscreen
- Cover up: a shirt that covers your shoulders and a broad brimmed hat are essential on sunny days
- Take regular short breaks

While working in the sun there is also the risk of dehydration. Ensure that you drink plenty of fluids and take regular short breaks.

Using the Mower

Using a mower can be dangerous when the user is inexperienced or lacking in common sense. Please observe the following when using the lawn mower:

- Carefully check the mower before starting the engine to ensure that it has adequate fuel and oil and that there is no visible damage
- Check the area you will be mowing for any objects that might be hidden in the long grass
- Ensure that other people are well out of range of flying debris
- Ensure that you wear the appropriate PPE, including covered shoes (preferably steel-cap safety boots), long pants, ear muffs and safety glasses
- DO NOT use the lawn mower if you have never used one before; request assistance

Using the Whipper-snipper

- The whipper snipper should be used with the same level of caution as the lawn mower. Ensure that you:
- Carefully check the whipper snipper before starting the engine to ensure that it has adequate fuel and oil and that there is no visible damage
- Check the area you will be working in for any objects that might be hidden in the long grass
- Ensure that other people are well out of range of flying debris
- Ensure that you wear the appropriate PPE, including covered shoes (preferably steel-cap safety boots), long pants, ear muffs and safety glasses
- DO NOT use the whipper snipper if you have never used one before; request assistance

Using Power Tools

Occasionally there may be a need to use small power tools such as drills or sanders. All power tools are checked and tagged every three months, however you should still observe the following precautions:

- Carefully check the tool, including power cords, before using to ensure that it is not damaged and that it is safe to use
- Ensure the area you are working in is safe and that surfaces are stable and clear of clutter
- Ensure that other people are well out of range of flying debris
- Ensure that cords are kept off the ground and that they are not a tripping hazard

- Ensure that you wear the appropriate PPE, including covered shoes, dust mask, ear muffs and safety glasses
- Ensure all machine guards are in place and fit for the purpose
- DO NOT use any power tool that you have never used before; request assistance

Snake, Spiders and Creepy Crawlies

Not all insects and reptiles are bad but some of them do bite. Be aware of this and follow the following precautions:

- Wear safety boots at all times and long pants when working in long grass or near water
- Know where the First Aid kit is located
- If a snake or spider bites you do not panic. Sit down immediately and call for help. Do not continue walking around
- Always wear gloves when reaching into enclosed spaces
- If you see a snake, walk away slowly and carefully
- Avoid working around swampy areas after rain to avoid mosquitoes
- There is a cream for insect bites in the First Aid kit

Discarded Hypodermic Needles

There is a real risk of encountering discarded hypodermic needles at the community garden, particularly along the riverbank.

To avoid injury from discarded hypodermic needles you should wear strong, covered shoes at all times. Gloves should also be worn when you are reaching into enclosed spaces. If you discover a hypodermic needle DO NOT pick it up unless you are wearing leather gloves. Dispose of the needle in the sharps container located in the First Aid kit.

In Case of Fire

- In the unlikely event of a fire in the Youth Café, please follow the following procedure:
- Alert someone immediately so that the Fire Service can be called
- Evacuate to the eastern side of King Street immediately. Remain here until you have been checked off by a supervisor so that there is no confusion as to whether or not you are safe
- Close any doors to help prevent the spread of the fire
- Let someone know if you are leaving the work site so that we know who we need to keep track of
- If you are stuck in the building and there is a lot of smoke, get down on your hands and knees and crawl to the nearest exit
- Stay calm. Don't panic!

ALWAYS LOOK AFTER YOURSELF AND OTHERS!

9. Community Gardening in SA Organic Gardening Factsheets

Companion Planting

Fruit Trees

Mulch

Pests

Planting Seedlings

Propagation

Seed Saving

Water

Weeds

Companion Planting

It is not normal for any living thing to grow in isolation, or in contact with only others of the same kind.

Diversity and interconnection are basic ecological principles.

Companion planting creates a diversity of species within the garden. Carefully arranged plants assist each other's growth by reducing pest numbers and creating favorable growing conditions.

Scent

Strongly scented herbs mask the scent of other plants, confusing pests, which identify their targets by smell. Example: broccoli and cabbage will suffer less damage from the caterpillars of the cabbage white butterfly when planted among sage, rosemary or dill.

Attracting Predators

Providing food and habitat for insects that are predators or parasites of insects that damage plants can reduce pest numbers. Example: parsnip flowers are a food for parasitic wasps.

Repelling or killing pests

Some plants are toxic to pests. Example: French marigolds will kill off some harmful nematode species.

Altering appearance

Flying pests often identify their food supply by its shape. Growing

different plants closely together means that there are no distinctive outlines for pests to identify. Example: weeds grown amongst mung beans keep down beanfly numbers.

Shelter

A carefully placed stand of taller plants creates a sheltered spot. Example: Plant corn near pumpkins.

Support

The stalks and branches of a large sturdy plant can support a climber. Example: Sweet peas climbing through the low-lying branches of an orange tree.

Nitrogen fixing

Leguminous plants host bacteria in their roots. These bacteria fix nitrogen, supplying this nutrient to their hosts and indirectly, to neighbouring plants. Example: Clover grown around cauliflower.

Allelopathy

Substances released from plants into the soil can affect the growth of neighbouring plants. Many plants inhibit the growth of others, but a few enhance it. Example: Plants promoting the growth of others nearby include nettle, calendula, yarrow and (planted sparingly) chamomile.

Minerals

Deep-rooted plants draw up minerals from the subsoil, returning them to the topsoil. Example: Comfrey draws up potassium, which is released into the soil as the leaves die off in late autumn.

Bad Companions

Plants to avoid planting near others include large trees, (particularly conifers, eucalypts and walnuts), strongly bitter herbs (wormwood, southernwood, tansy, rue) and heavy feeders which may also release growth inhibitors (brassicas, sweet corn, sunflowers).

Intercropping

Save space by growing small, quick growing vegetables between larger slower growing ones. The small vegetables can be harvested before the larger ones claim their growing space.

Guilds

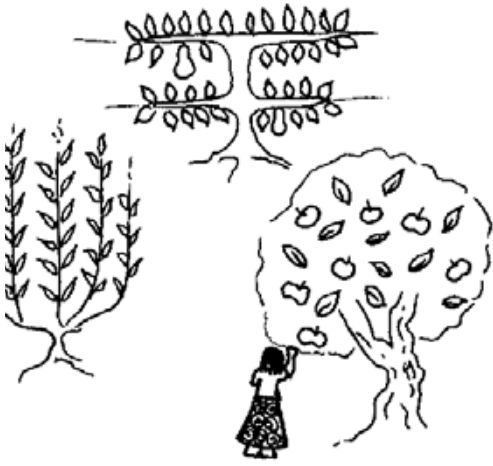
A small number of plants which all grow well together is called a guild. A common three-plant combination is sweet corn, pumpkin and climbing bean. A common four-plant combination is tomato, basil, marigold, and lettuce.

Other factors to consider when deciding what to plant with what include: size, growth rate, root depth and type, nutritional needs, soil conditions, soil type and watering needs.

From the Community Gardening in SA Resource Kit. Originally written by David Corkill for organic gardening courses at Fern Ave Community Garden. May be reproduced for use in community gardens.



growing fruit trees



South Australia has wonderful conditions for temperate to subtropical fruit production. Our dry summers and lack of fruit fly are the envy of many in the eastern states. We can grow anything from apples to avocados in most areas. Community gardens are ideal places to demonstrate techniques for growing fruit trees in urban spaces, and to preserve delicious heritage varieties.

Selecting and planting fruit trees

Autumn is the time to prepare for deciduous fruit species. These include Mediterranean fruit trees such as apricots, figs, grapes, loquats, mulberries, persimmons, pomegranates and quinces.

Temperate species like apples, cherries, peaches, pears, plums and nectarines should also be on your list. A little homework first will pay dividends, as not all varieties will grow in all areas.

Some temperate fruit species require cold winter temperatures. Low-chill varieties such as

Sundowner, Pink Lady, Lady Williams, Granny Smith or Golden Delicious ensure success with apples on the Adelaide plains.

Some varieties require cross-pollination, others are self-fertile. Selecting early, mid and late season varieties will extend fruit-picking season. Your local nursery should be able to help you here, if not try the local library or the internet.

Site requirements

Your site should have full sun for at least half the day and some protection from wind, especially if using dwarfing rootstock. Soil needs to be free draining, as fruit trees do not like wet feet. If your garden is on clay soil, add gypsum and organic matter, or consider sub-surface drainage if drainage is very poor. Soil preparation can start in advance of planting, with a green manure crop sown to be turned in before planting or an application of compost.

How many can we fit?

The number of trees will depend on species, dwarfing characteristics and training techniques you choose. Dwarfing fruit trees are easily maintained size but may not be as hardy or productive as semi-dwarfing varieties, which can be close planted and trained to limit their size. Training needs to start early, at planting time. Keeping your fruit trees to a moderate size allows easier picking, pruning and netting, as birds will surely attack your best fruit just before they ripen.

For maximum utilisation of space especially on a wall or fence, fruit trees can be trained on a flat plane as an espalier. Examples of espaliered quince, citrus and plum can be seen at the Adelaide Botanic Gardens. Free-standing trees can be trained to a central leader to limit size. The open vase shape requires more space but is especially suited to apricots.

Finding out more

So visit your local nursery, library or orchard to get ideas and find out what's available. Notice what fruit trees are growing in older houses in the neighbourhood.

Visit the Rare Fruit Society of S.A. website at www.rarefruit-sa.org.au

Borrow or add to your library a copy of Louis Glowinski's 1997 book, *The Complete Book of Fruit Growing in Australia* Lothian 382pp.

Healthy homegrown fruit will be sooner and easier than you might think.

Written by David Harrison for the Community Gardening in SA Resource Kit.
May be reproduced for use in community gardens.

Mulch

Bare soil rarely occurs in nature. A thin layer of debris comprising dead leaves and twigs, with small amounts of various manures covers it. This surface layer protects and nourishes the soil beneath. Gardeners may add a layer of mulch to the surface of the garden to achieve the same purpose. To be effective, mulches should be 5cm or more deep, with coarser materials needing to be applied at a greater thickness than finer ones. A no-dig garden uses a deep mulch, 15cm or more, as a growing medium.

Benefits of mulch

- Reduces water evaporation resulting from protection from wind and sun
- Adds organic matter and nutrients, improving fertility, structure and water retention
- Increases biological activity within the soil
- Maintains soil surface condition, eliminating problems of crusting and non-wetting
- Eliminates dirt splash and associated disease attack
- Preserves soil structure



- Reduces weeds by smothering and limiting germination
- Harbours beneficial predators such as spiders and centipedes
- Reduces erosion by slowing the movement of surface water
- Buffers extremes of soil temperature, particularly in the hot summer weather.

Disadvantages of mulch

- Harbours pests such as slugs, snails, earwigs
- Some types of grassy weeds grow in mulch
- Soil warming is slower in spring.

Some mulch materials

Straw and hay: Any straw or hay is suitable. Avoid material with seeds. Shake the hay before adding it to the garden if you suspect it contains seeds. Lucerne hay is the best mulch material as it contains a range of essential elements. Pea straw has reasonable nitrogen content, but is very light and breaks down quickly.

Bark/woodchip/sawdust: These woody materials form a long-term attractive colour, especially suitable for landscaping and ornamental gardens. Sawdust is good on pathways.

Leaves: Fresh leaves should be shredded or mixed with other materials before being used as mulch or they will form a matted waterproof layer. Some leaves, such as eucalypt, walnut, and pine (acidic) have an adverse affect on soil life. Leaf mould, made by allowing a pile of leaves to completely decompose, is a good mulch.

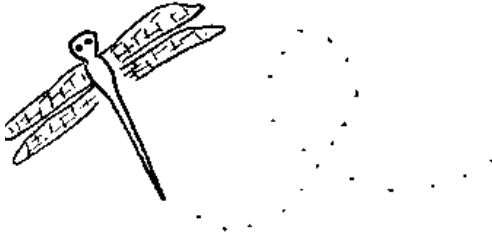
Shredded mulch: An excellent coarse mixture of wood chip and leaf. Home shredders can turn prunings into mulch. Large quantities may be purchased from garden supply depots. Avoid eucalypt, olive (which may contain seeds), or pine-based shredded mulch.

Newspaper: Use under other materials to smother weeds. Wet well before use. Do not leave paper uncovered or it will get blown about and create a mess. Glossy coloured paper is toxic and must not be used.

Seagrass: Long lasting cover that breaks down very slowly. Collect after rain to avoid salt, or water it down before applying.

Lawn clippings: Do not apply lawn clippings too thickly or they will go slimy. They tend not to last long and break down quickly. They may contain couch or kikuyu pieces, which can regrow. The properties of a

Organic Pest Control



The aim of organic pest control is to reduce damage to an acceptable minimum. It is neither possible nor desirable to eliminate all pests completely from the garden.

Natural balance

If the right conditions are created in the garden, a host of useful predators and parasites can be encouraged to move into the garden and do the pest control for you. These conditions are habitat (somewhere to live) and food (pests or other food used during different times of the predators' life-cycle). The best way to maintain the conditions required for a range of useful organisms in the garden is to grow a diversity of plants and to avoid the temptation to try to eliminate all pests.

Some commonly found useful garden predators and parasites are birds, lizards, frogs, spiders, ladybirds, hover flies, lacewings, dragon flies, praying mantis, centipedes, parasitic wasps, and predator mites. Small children with instructions to collect snails can be useful too.

Soil Conditions

Improving soil quality can reduce the occurrence and impact of pest and disease in the garden. Plants grown in good healthy soil will be healthy and healthy plants are disease resistant. Fungi and moulds in healthy soil produce natural antibiotics, cleansing the soil and aiding plants' disease resistance. Unhealthy plants, including plants raised on artificial fertilisers, attract pests. Healthy plants will resist pest attack and outgrow pest damage.

Organic sprays and dusts

Materials with natural insecticidal properties, which quickly break down and do not cause contamination may be used to kill garden pests. They will also kill many useful organisms so only use as a last resort.

Pyrethrum - The dried flower heads of the pyrethrum daisy are used to make an insecticide spray, Though non-residual, the spray is quite strong and should be used with caution.

Neem - Oil extracted from the Neem tree has insecticidal, fungicidal and antiseptic properties.

Quassia - The wood and bark of the Quassia tree, from South America, is a mild insecticide. Quassia chips can be kept in long term storage with little loss of potency.

Bacillus thuringiensis - A micro-organism that acts as a stomach poison for caterpillars. Sold under the name "Dipel".

Sulphur - A yellow mineral used as a powder. Fungicide and miticide. May damage tender plants.

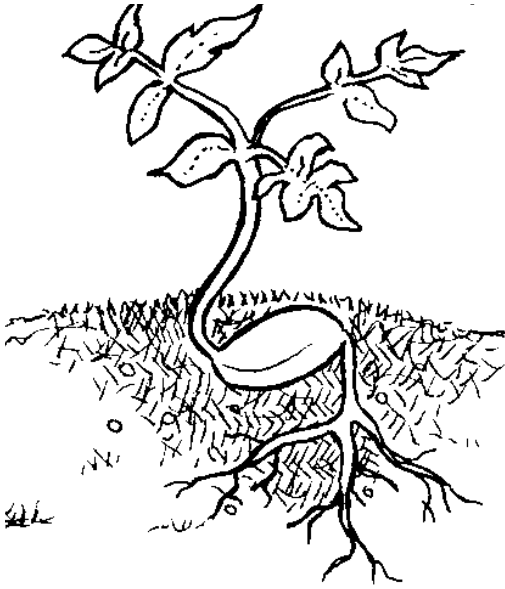
White oil - Mineral oil used to control scale. Acceptable for occasional use.

Repellent sprays

Home-made repellent sprays are prepared as per herb tea then sprayed to protect vulnerable plants. Some have mild insecticidal properties. They include garlic, rhubarb, cloves, aniseed, sage, camphor, chillies, chives, onion, feverfew, wormwood, tansy. Mixing soap with a spray improves its wetting ability and increases the insecticidal effect.

From the Community Gardening in SA Resource Kit. Originally written by David Corkill for organic gardening courses at Fern Ave Community Garden. May be reproduced for use in community gardens.

Planting seedlings



When to plant

Seedlings can be planted out into the garden when they are about 4cm tall and have developed their second set of leaves (following the first 'cotyledons' that emerge from the seed). They should be full and strong, rather than 'leggy'. Some gardeners prefer to keep seedlings in the nursery, where it may be easier to protect them from pests and keep them watered, until they're bigger and stronger.

Avoid planting out at hot and windy times of day, as the plants will dry out quickly. Dawn or dusk of an overcast day when rain looks likely is ideal.

Biodynamic gardeners use the cycles of the moon to help decide when the best time to plant is. According to this

method, seedlings are best planted out in the week following new moon.

Some people who are on speaking terms with their plants like to give them 24 hours notice before they plant them out, or even ask if it's ok first...

Hardening Off

The plants you propagate (or buy) are usually grown in a sheltered, protected environment. They will need to be hardened off so they will suffer less of a shock when they go into the ground. Before they are planted in the garden, leave them for two to three days in a place with similar conditions to where they will be planted.

Planting the seedlings out in the garden

Push aside any mulch and make a hole one and a half times the depth of the pot with a hand fork or trowel. Fill in the bottom of the hole with compost and mix in with a little of the surrounding soil.

Squeeze the pot gently to loosen soil, then tip on its side so the plant slides out. If your seedlings are in egg cartons, newspaper cups, or other pots that will break down, they can be put straight in the hole without removing their containers.

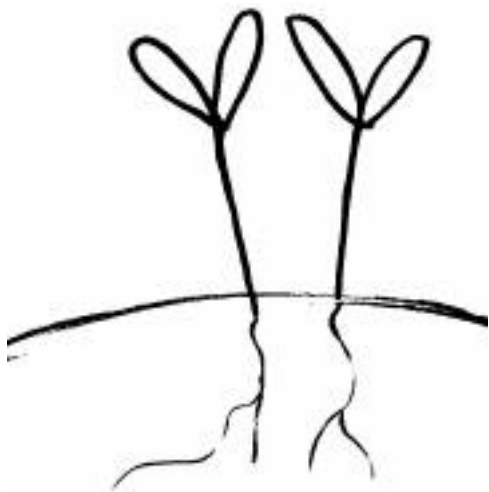
It's generally best not to disturb the roots of the plant. However, if the roots have become 'pot bound' and are circling the pot, you may want to loosen them, either by 'tickling' gently or – if very tightly bound – by using a knife to make centimetre deep cuts from top to bottom at intervals around the root ball.

Place the plant in the hole and fill in with soil – make sure the soil level remains about the same as it was in the pot. Firm in gently.

Water your seedlings in well with a watering can or hose with a rose fitting. Always water newly transplanted plants, even if the soil's already moist. Keep your plants well watered for their first few days in their new home.

From the Community Gardening in SA Resource Kit. May be reproduced for use in community gardens.

Vegetative *Propagation*



Growing new plants from pieces of a parent plant will give you plants that are genetically identical, ie clones.

Cuttings

Pieces of a plant stem are cut and placed the right way up in a striking mix. If possible, don't use pieces longer than 10cm or thicker than 1cm. The softer/greener the stem, the smaller the cutting. Always use healthy pieces of stem.

Taking stem cuttings

Make a clean level cut through a node at the base of the cutting. Cut the top of the piece at an angle 1cm above a node, or with a tip cutting, leave the tip of the stem intact. Carefully remove all leaves from the lower 3/5 of the cutting without stripping any bark. For large leafed plants, trim back and shorten the leaves that remain on the top of the cutting.

Fill a box or pot with striking mix and makes holes in it with a

stick to a depth of about half the length of the cuttings. Slot the cuttings into the holes, press them in gently then water with a soft shower.

Root Cuttings

Some plants can be grown from pieces of root placed in a cutting mix. Cut the pieces 5cm long. Bury them vertically in the striking mix, the right way up. To remember which way is up, cut the upper part of the root cutting flat and the lower part on an angle. If uncertain about which way is up, place them horizontally in the mix. Keep the mix damp. Take the cuttings at a time when the plant is dormant, for most plants this is during winter.

Shade and Moisture

Cuttings are more successful if they are kept as moist as is practical without stopping the circulation of air. You may install misters in the propagating area or loosely place a plastic bag over each pot. All cuttings should be placed out of the sun.

Potting On

When the cuttings are growing new roots and/or leaves, remove them from the container of striking mix without damaging their roots, and put them in a pot with potting mix. Water immediately then regularly.

Division

Plants that form large clumps at the crown may be dug up in winter, broken into smaller pieces and replanted. Some plants need to be lifted and divided regularly to keep them in good condition. Cut back most of the leaf and root growth before tearing the clump apart. Ensure that each new leaf has leaf, or an "eye" from which a new leaf may grow, and a portion of roots.

Layering

Sometimes, when a branch lies on the ground, it will grow roots. Once a good root system is established, the branch may be cut from the main plant and relocated as a new plant. You can layer plants by pegging lower branches to the ground, covering them lightly with soil. A couple of longitudinal scratches on the underside of the branch should encourage root growth.

Where do you find seeds?

- In seed heads, e.g. lettuce, parsley, basil, carrot, parsnip, silverbeet, beetroot, dill, fennel
- In pods, e.g. peas, beans, cabbages, broccoli, bok choy, mustard
- In fruits, e.g., tomatoes, capsicums, chillies, cucumbers, pumpkin

What's flowering or going to seed in your garden now?

How to Save Seeds

Start with good seeds when you start your garden.

- Choose local seeds because they are adapted to local conditions.
- Choose non-hybrid seeds because you can rely on them producing true-to-type seeds.

Take seeds from your own garden – start with tomatoes, beans and lettuces as they are the easiest.

Select the best plants to save seed from – let the most healthy, productive plants to go to seed. You need to keep more than one plant of some types of plants, like cabbage, corn and silverbeet. Label them as off limits to anyone harvesting the garden!

Collect the mature seeds.

Seeds must be left on the plant until they are fully mature- this is critical for good viable seed. Pick them in dry weather.

Dry the seeds. Put the seeds in a closely woven basket, into a paper bag or onto a canvas. Dry away from the sun for between one and three weeks depending on size and weather.



Clean the seeds. Separate the seeds from their receptacles -- shell the pods, shake the seed heads and squeeze out fleshy fruits. Winnow the seeds from the chaff and put them into a paper bag for further drying if necessary. Wash the flesh of fruits from the seeds and set them out to dry on paper, or a plate.

Store them safely. On a dry day store the seed in an airtight container with bay leaves to discourage insect attack. Keep them in a cool, dry and dark place.

Sowing seed

Sow in season. There are two main planting seasons, spring and autumn; many plants can be planted in only one of those seasons. Some, however, can be planted all year round. Sow with care.

Sow large seeds directly in beds. Small seeds can be sown in punnets of fine sandy soil and compost, or may be direct sown if the soil is fine enough.

Sow each seed two to five times as deep as its diameter, depending on the texture of the soil -- deeper for sandier soil, shallower for clayey soil. Press down the soil over the seed gently. Water once a week....unless it rains, of course.

Written by Michelle Mohyla for the Community Gardening in SA Resource Kit. May be reproduced for use in community gardens.

Tips to save water in your garden.

Design the planting of your garden according to the plants' water requirements - plants that need lots of water can be grouped together so water isn't wasted on plants that can flourish with less. Drought tolerant plants in appropriate positions can shelter more fragile plants from sun and winds.

Observe, create and utilise microclimates in your garden - plant water-loving species in areas which tend to stay damp - such as in swales, at the bottom of slopes, around ponds or in rainwater runoff areas - and use more drought tolerant species in drier areas.



Choose plants which are most appropriate to the climate you live in - local species are a good place to start.

Don't let rainwater leave your garden! Install rainwater tanks to harvest roof runoff and direct overflow into swales or ponds. Maximise the infiltration of water which falls on the earth - mulch helps to reduce evaporation as well as feeding the soil and making plants more resilient, basins or mounds built around shrubs and trees also limit runoff. Minimise impermeable surfaces such as driveways and cement paving. Lay pavers so water can soak through.

Minimise lawn. Accept that lawns will become dormant for part of the summer - most will recover when rains return. Mow less and allow grass to grow longer for a deeper root system.

Prune your fruit trees from the bottom - the fewer leaves the less water leaves the plant and the less it requires. Pruning from the bottom also creates beautiful shady canopies

Take notice of weather conditions - turn off automatic systems if it is raining! The best time of day to water varies. In Adelaide's hot, dry summers, evenings after sunset are a good time - that way water has a chance to infiltrate before hot days evaporate it. In cooler conditions, early mornings are preferable. Never water in the sunshine or wind.

Water less often and more slowly and deeply. This will encourage deeper root development for greater drought tolerance.

Written for the Community Gardening in SA Resource Kit. May be reproduced for use in community gardens.

Organic Weed Control

Weeds are plants in the wrong place. They are survivors, being vigorous in growth and/or prolific in seeds. Weeds cause problems for gardeners by reducing productivity and affecting the appearance of the garden. Although weeds are often a problem, they may also have some benefits.

Methods of weed control

Organic weed control can be time consuming and hard work. It is important to practise good garden management to create conditions that reduce and prevent weed growth to minimise the amount of time needed for weeding. A number of methods may be used to achieve this, and to remove existing weeds:

1. Cultivation - digging out with a fork or machinery.

Weeds as soil indicators

As weeds will grow wherever they are best able to, the types of weeds growing in a particular place may be an indication of soil condition.

<i>Soil Type</i>	<i>Indicator Weed</i>
Poorly drained & acidic	Dock, Sorrel
Waterlogged	Bulrush
Overgrazed & compacted	Salvation Jane, Horehound
Saline	Saltbush
Sandy	Primrose, Coastal Galenia
Infertile, dry & compact	Caltrop, Wireweed
Rich fertile loam	Sow Thistle, Nettle, Chickweed.

Excessive cultivation damages the soil

2. Chipping - using a sharp hoe or spade to remove the weeds at or just below ground level with minimal soil disturbance
3. Smothering - covering with mulch, newspaper or other suitable material
4. Solarisation - cooking the weeds under plastic in hot weather
5. Barrier - solid or growing barriers contain the spread of invasive plants
6. Slashing - cutting the leafy growth after flowering and before seed set
7. Improving soil conditions - Maintain good soil structure, fertility and mulch coverage to help prevent weed infestation
8. Crowding - dense plantings and green manures give weeds nowhere to grow
9. Hand pulling - the best method for getting weeds that are in amongst the plants you want to keep
10. Heat - flame or steam weeders kill by cooking the leafy top growth. You can also pour boiling water on them
11. Persistence - there are no instant fixes.

Invasive weeds

These are plants that spread by means of specialised underground stems. Includes couch, kikuyu, bamboo, mint etc. Control with methods 1,3,4,5,7 & 11.



Worm Farming

Organic matter for recycling tends to present itself irregularly. One minute you have a few veggie scraps, the next a pile of weeds and clippings from the garden. For me, worm farms are the easiest and most productive way of dealing with the ebbs and flows of organic waste generated by a household or community garden.

It is a matter of setting up a system that suits you and the amount of organic waste that you have. Then you can start producing a constant supply of high quality fertiliser with little effort.

Compost worms

Compost worms are different to the earthworms that till the soil. They are active worms that thrive on organic matter, eating through their bodyweight daily. In the process they produce a high quality fertiliser, rich in humates and beneficial microbes. Humates help build

soil, holding nutrients and moisture in the soil rather than letting them leach out, and making them available to plant roots and soil microbes. Most pathogenic microbes are destroyed in a worm's gut, including the common human pathogens. Any plant material infected by viruses, eg tomatoes and other solanums, should not go into a worm farm. Weed seeds will also survive in a worm farm – indeed worm castings are the ideal germinating medium for seeds.

kinds of worms

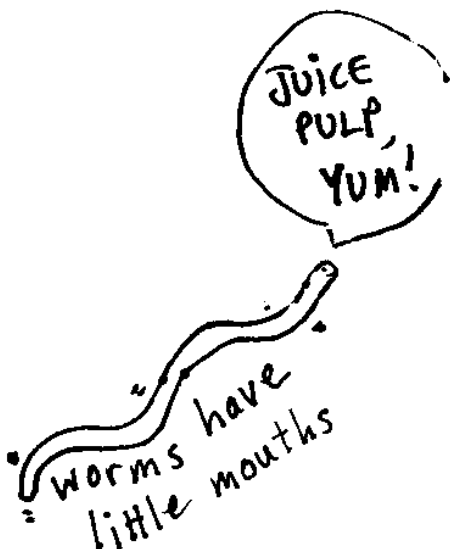
The common species used in worm farms are the red, tiger and blue wriggler. All are subtropical worms which prefer a temperature range in the twenties (Celsius). They require moisture, without being saturated, and protection from direct sunlight.

Any organic matter, other than citrus peel, onion and garlic, is suitable. Make sure that pesticide residues are minimal and that manures contain no worming agents. Powdered dolomite is the other ingredient you can sprinkle on as you add matter to the worm farm or if the contents go sour.

a home for your wriggly friends

A worm farm needs to confine the worms and hold organic matter. It should hold moisture yet drain, be vermin proof, and allow easy access. The depth need only be 25-30 cm. Surface area (and feeding) will determine worm numbers and size. There are a number of commercially available worm farms, including "worm factory" and "can o worms". These have a number of compartments that stack vertically and allow ease of worm management and harvest of the castings. The liquid that drains from worm farms is valuable for fertilising plants. There are other commercial systems that rely on the worms moving horizontally to manage them and harvest castings. Both systems are easy to make from a variety of containers.

Styrofoam containers can be readily adapted for a stacking system. Baths are useful for a horizontal system. I use two halves of a drum (cut lengthwise) mounted on a metal frame, one above the other. The top one drains into the bottom, which drains into collecting vessels. The harvested "worm wee" is used constantly to fertilise pot plants and the garden. Flywire screens cover the tops protecting the worms from vermin. This is important if you are adding any meat, eggs or milk as rats, mice and flies will follow if not excluded. Shade is important, particularly in summer. Mine are housed under a grapevine with shade cloth over the screens.



References

Auckland City Council undated, *Community Gardens Policy*, Auckland City Council, Auckland.

Bartolemei, L, Corkery, L, Judd, B & Thompson, S 2003, *A Bountiful Harvest: Community Gardens and Neighbourhood Renewal in Waterloo*, NSW Department of Housing and the University of New South Wales, Sydney.

Braxton-Little, J 2002, *Greener Spaces Make Safer Places*, California Trees Magazine, The Trust for Public Land, California.

Campbell, A 1998, *The Development, Management and Operation of Community Gardens in the South Sydney City Council Area*, NSW Institute for Local Self Reliance Inc., Sydney.

Copeman, D & Norton, T, (2003), *New Farmers' Training Manual*, Northey Street City Farm, Brisbane.

Corkery, L 2004, *Community Gardens as a Platform for Education for Sustainability*, Faculty of the Built Environment, University of New South Wales, Sydney.

Department of Health, Government of South Australia, 2004, *Community Gardening in SA Resource Kit*, report prepared by C Fulton, Community and Neighbourhood Houses and Centres Association Inc., Adelaide.

Grayson, R & Campbell, F 2000, *Planning and Starting your Community Garden*, Australian City Farms and Community Gardens Network, viewed 14 February 2008, www.communitygarden.org.au/start/print.html.

Grayson, R 2007, *Community Gardens: Policy Directions for Marrickville Council*, Marrickville Council, Sydney.

Hunter, J 2006, *Community Gardening in SA Project Report*, Community and Neighbourhood Houses and Centres Association Inc. (CANH), Adelaide.

Ketai D 2006, *Strategies for Maintaining a Functional Community Garden*, University of New South Wales, Sydney.

Milne, G 2002, *Good Practice Guide for Community Gardens*, Cultivating Communities, Melbourne.

Randwick Community Garden 1997, *Randwick Community Organic Garden Policy*, Sydney.

Torquay and Jan Juc Community Garden Management Committee 2002, *Management Plan - Torquay and Jan Juc Community Garden*, Victoria.

Urbis, Keys, Young 2004, *Community Greening Program Evaluation Final Report*, prepared for the Botanic Gardens Trust and the NSW Department of Housing, Sydney.

Woodward, P & Vardy P 2005, *Community Gardens*, Hyland House, Melbourne.

Woollahra Municipal Council 2007, *Community Gardens Policy*, Woollahra Municipal Council, Sydney.