

# The Early Years Gardening Handbook

by Sue Ward

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# Why should young children be involved in gardening?



The Early Years Foundation Stage (2007) refers to the positive impact of time spent outdoors for children's development and sense of wellbeing. Outdoor environments offer children freedom to explore, use their senses, and be physically active. Young children are active learners with a natural curiosity that requires them to have hands-on contact with the real world. Involvement in gardening gives them purposeful opportunities to explore, investigate and discover new things.

Access to a garden and opportunities to contribute to what is grown there, can boost children's self-esteem and encourage them to develop a greater understanding of the role they play in caring for the world around them. They learn to take responsibility for living things and will hopefully develop a life-long respect for nature. Children who spend regular time within the garden frequently show higher levels of engagement and motivation than when indoors.

Through gardening, there are many enjoyable ways to meet the aims of Every Child Matters (2004).

## Be healthy

It is impossible to create a thriving garden without getting active and children will generally love the opportunity to get involved in activities such as digging and watering plants. Growing their own crops and cooking them will help children develop their understanding of healthy eating choices, and they will often be prepared to try new foods that they have grown.

## Stay safe

Children need to understand what is acceptable when using the garden. For example, they must learn to handle tools appropriately, know when it is safe to taste plants and take steps to stay safe when outdoors in all types of weather.

Over recent years educational settings have become increasingly interested in inspiring children to become involved in gardening. The focus has often been on older, school-aged children who are more suited to approaching the garden in similar ways to adults. There has been very little support for professionals looking to involve younger children in exciting and beneficial gardening activities. An early years garden is most effective when it meets the specific needs of the under fives, both in its design and the way it is used.



## Enjoy and achieve

Gardens are constantly changing with the seasons and are excellent resources for learning. They provide opportunities to develop concentration skills, problem-solving and decision-making. Children of all abilities can develop a greater understanding of the seasons, the weather and how food grows through first-hand experiences.

Gardening activities link well to the Early Years Foundation Stage. There is a section at the end of this book (see pages 54-62) that provides a selection of activities, all of which fulfil several of the Early Learning Goals.

Developing a garden will give the children in your care the chance to have many wonderful and memorable experiences. The impact of the outdoors is sometimes undervalued but we owe it to the next generation to give them a range of opportunities connected with the natural world.

## Make a positive contribution

Gardening helps young children understand their place within the world and the impact they have upon it. It creates opportunities for social interactions and the development of relationships between peers and across different generations. Through gardening, children will learn about developing personal qualities, such as patience and respect; they will also learn to work independently and within a team.

## Achieve economic well-being

'Growing' projects can help young children understand basic concepts around the use of money. For example, they will learn that seeds are purchased and the produce from these seeds can be sold to the local community to generate more funds to support further development of the garden.

# Getting started



## Home links

Involve parents and carers from the start. A regular garden newsletter will help to get the whole community more involved and should hopefully lead to offers of support and donations.

as the garden grows. And of course, talk about your ideas with the children since their enthusiasm can often be a driving force.

You may wish to carry out a skills audit. This will enable you to discover different ways in which people can contribute to the development of the garden. Some of the skills which might be needed include:

- Basic DIY – laying slabs, carpentry, painting etc
- Landscape design
- Gardening – both labouring and knowledge of plants
- Fundraising
- Finding and applying for grants
- Cooking

Ask for useful contacts which can be used to help resource the garden such as a parent who works in a local garden centre or who has access to cheap building materials. If you have keen gardeners amongst your community, encourage them to grow a few extra plants at home which can then be planted in the garden once it is ready.

You can spread the work load by allocating members of the project team a range of roles. Different people will naturally be suited to taking on different responsibilities so first identify what areas of work need to be covered. The main areas might include;

**Project coordinator:** Although this role can seem the most daunting, this person may simply be responsible for keeping

## Getting a team together

Before you launch into enthusiastic digging of beds or blow your budget on packets of seeds with fantastic pictures on the front, it is wise to first stop and to consider who is going to manage the gardening project, both now and in the future. Perhaps you are a keen gardener who wants to share the pleasures of gardening with the children in your care, or maybe someone has selected you as an 'outdoors' person to get the garden underway. However you have become involved, it is important that you form a group of interested individuals to develop the project, make decisions and share the workload. This will also help to ensure that the garden continues to thrive in the future, even when there are changes in staff.

Start by talking to as many people as possible about your ideas for the garden and how it will benefit the children. Staff members in particular need an opportunity to voice their concerns early on. Perhaps they see it as extra work on top of an already busy workload, or they may be concerned that they will be expected to get cold or dirty. As the project develops, you will hopefully find some willing volunteers to get involved. Send a flyer home to parents or create a display board which can be adapted over time

track of the overall progress of the project and arranging regular meetings. In practice, there is often a single person who will ensure that the project continues to be driven forward and who takes responsibility for ensuring that all members of the project team understand and fulfil their allocated tasks.

**Fundraising coordinator:** This may be an individual or a team of people who have the task of finding suitable funding to support the garden development. They will need to investigate external grants or competitions and will also be responsible for contacting local businesses and organisations to ask for donations. They may also head up the group who organise fundraising events amongst parents and the local community. You may wish to have a separate individual to take responsibility for the finances, monitoring the incomings and outgoings once the project is underway.

**Communication/publicity:** Communication is vital both within the setting, in keeping people informed and helping to maintain momentum, as well as within the wider community via the local press.

**Fact-finder:** Once again, this role is probably best taken on by a group of people who coordinate the collection of information needed in the planning and creation of a successful garden. It might include visiting other settings, attending training opportunities, ordering brochures or scouring websites for inspiration.

## What have we already got?

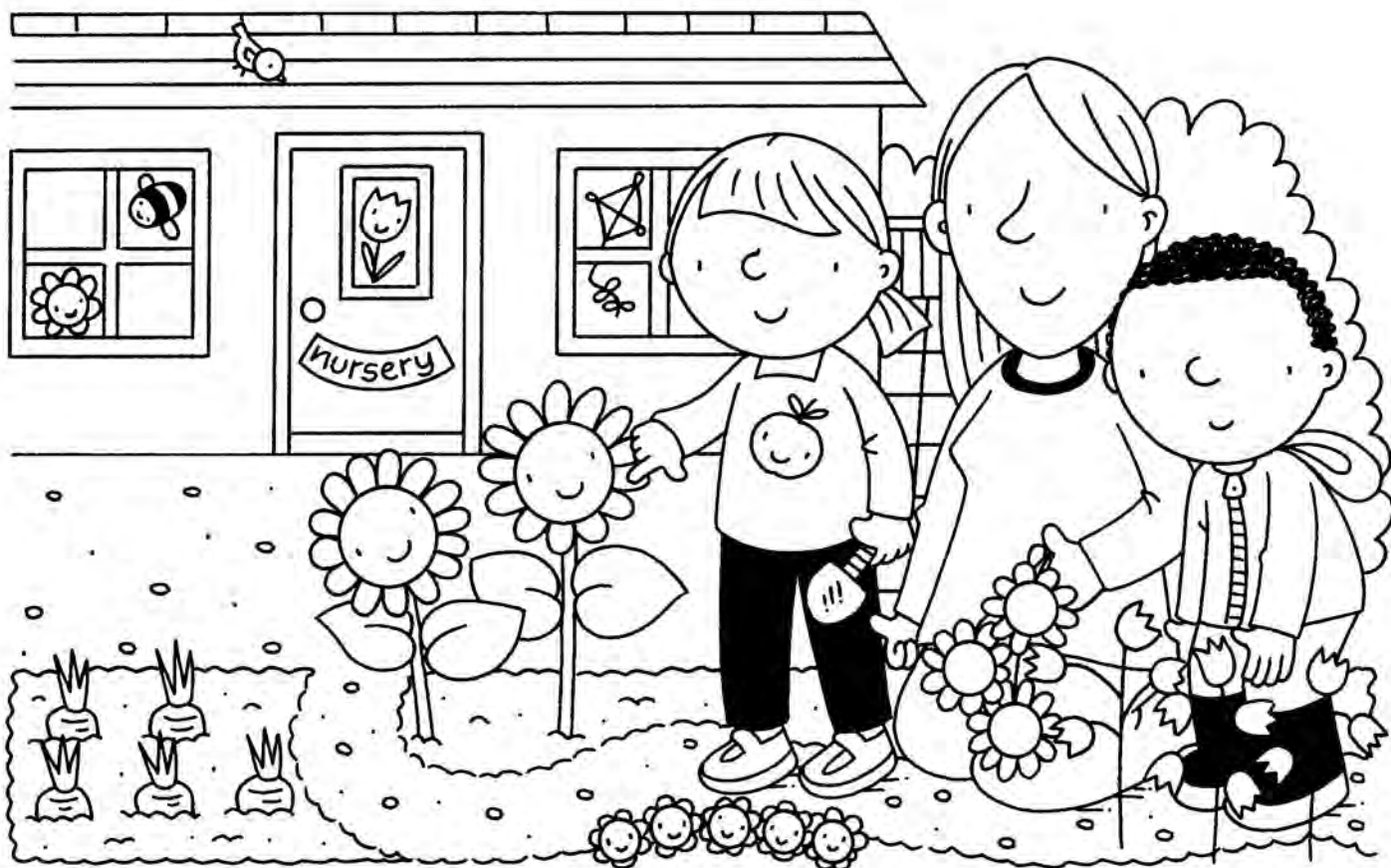
Many settings may already have an area used for growing. This may be little more than a couple of pots or you might be fortunate enough to have ready prepared beds. Some settings will have an area so overgrown that no one has ventured into it for years whereas others may be faced with a newly created outdoor area, perhaps simply tarmac or grass. Whatever your situation it is important that you stop and ask a range of questions before planning your new garden. This will ensure that you make the best use of what you already have and it will give you valuable information for when you are drawing up your designs.

Some of the questions you might need to ask include:

### How big is the area?

Many settings will have little control over the space which they can allocate to a growing area. However, if you are able to create the boundaries of your garden, first consider the number of children who might be accessing the area at any one time and think about how much space they will require.

If you are fortunate enough to have a large outdoor area, it might be tempting to create a garden the size of an allotment. However it is important that you consider whether you have the necessary time and manpower to maintain an area of that size. Also, begin to think about what you will be using your garden for. If planting



# Choosing plants



One of the most common concerns for any setting looking to begin growing plants with their children is to choose what to grow. The choice of available seeds, bulbs, plants and trees can seem daunting, particularly to the novice gardener. There are a number of factors that you might consider when visiting the garden centre for the first time and you will soon develop the confidence to try growing something new.

## What conditions will you be growing in?

Although it is possible to create artificial conditions to suit most plants, it is far easier when you are starting out to choose plants that are more likely to thrive in the conditions you already have. You may have already tested your soil to identify pH and soil type (see the Getting Started chapter for more details on this)

and this will already give you some idea of plants to avoid. Think about where the plants will be situated – will they receive full sun or are they shaded by trees or buildings for most of the day? Remember to consider the expected height of adjacent plants as this can create shade not present when you are initially planting. How windy is your plot? If you are planning to plant tall crops such as sunflowers or runner beans they will need staking and strong winds can soon cause damage as the plants grow.

Also, consider the extent to which your plants will be exposed to frost damage. If you live in the warmer South of the UK, you may feel confident that the risk of frost has past by early May, whereas further north, late frosts can create havoc to new growth. Few settings have the luxury of a polytunnel or greenhouse which can be used to raise the temperature allowing you to start the growing season earlier and continue it well into the autumn. However a simple cloche can be constructed from plastic tubing and clear plastic sheeting – just take a look on the internet for cheap ways to give young plants protection from the cold.



## Are you looking for permanent or seasonal plants?

You may have areas within your garden which you wish to plant with hardy perennials or shrubs for a more permanent display. This might include a sensory area, herb garden or flower bed close to your entrance. Once again the children can be involved in choosing and maintaining the plants and will develop a good understanding of the needs of the plants throughout the season. However, ensure that you leave areas for planting year on year so that each new group of children can experience the delight of seeing something grow from seed. It is not necessary to set aside a huge area as even a couple of attractive containers or growbags should be sufficient.

## Do you have time restrictions?

Some settings such as schools can be challenged by the need to fit in with holidays when the garden may have to be left to fend for itself. Even if this is not the case, you may have a group of children for a limited time and need to plan so that they can experience the whole process of seed to plate. If growing fruit or vegetables, choose those which will be ready for harvesting earlier in the year. There are many different varieties available but some to look out for include:

- Broad beans: Dwarf varieties tend to be hardier than those which grow taller – try The Sutton and Claudia Aquadulce which will not need staking.

- Berries: Choose plants with an early fruiting time - strawberries such as Mae can be planted up in a hanging basket or pot and kept indoors somewhere cool until placing outside in April for an earlier crop. Raspberry Glen Moy fruits throughout June and July.
- Carrots: Napoli, Early Nantes and Adelaide should be ready for harvesting in June or July.
- Peas: For tasty, early peas, try Early Onward which can be planted from February.
- Potatoes: Good early varieties to choose include Swift and Rocket.
- Rhubarb: By keeping your rhubarb plants in the dark with an upturned bucket in January and early February, you will soon get delicious slim, pale pink stems.
- Shallots: These onion-like bulbs are easy to grow – choose Longor or Golden Gourmet for planting in February.

Where possible, warm the soil first using heavy-duty polythene cloches. Many crops are quick to mature which is especially important with young children who can soon become frustrated if there is little to show for their hard work. Radishes are ready to eat only three or four weeks after sowing and can be sown regularly for a continuous crop.

A heated propagator can be purchased relatively cheaply and will allow you to sow your seeds earlier in the season. Alternatively, make use of a sunny window ledge to germinate seeds in a frost-free environment. It is not essential to grow plants from seed as most can be bought as seedling or plug plants (small plants with established roots). Garden centres and nurseries will have a wide range of flowering plants and vegetables which can be purchased while they are small before growing them on. This may give you a higher success rate but remember that the children will not have seen the complete process so balance this approach with sowing hardy seeds directly outdoors.

## Suitable plants for children

When selecting plants for your garden there are some that you will wish to avoid. Obviously you would not choose plants known to be poisonous if eaten or those which may cause an allergic reaction if crushed on the skin. These are discussed in more detail in the Staying safe chapter. However, you may also need to consider whether to include any plants which have prickles or those which could sting. Some settings decide that it is better to avoid any plants with potential risks whereas others will use the opportunity to show children how to take care in the garden.

## What appeals to children?

When planning what to grow, involve the children in the making the selection. Seed catalogues generally have brightly

# Activities linked to the garden

The garden is one of the most useful resources that you can develop within your setting. It can provide you with endless opportunities to develop enjoyable, simple activities, which meet one or more of the Early Learning Goals set out in the Early Years Foundation Stage. Your setting's garden should regularly provide inspiration for new ideas because it is always changing; from season to season and from year to year. It will give children opportunities to explore the natural world and develop their own interests.

## Knowledge and Understanding of the World

### Investigate objects and materials by using all their senses

- Ask the children to collect tiny pieces of leaves or flower petals and mix them with a small amount of water to create a 'smelly cocktail'. Show them how to crush the plant material between their fingers to release the smell. Ask: 'What happens to the water when the plants are added?' They might also like to come up with a suitable name for their cocktail. Use this as an opportunity to discuss the importance of not putting anything in their mouths without adult supervision.
- If you are growing herbs in your garden, ask the children to collect some of those with the most attractive scent. Cut the ends from pairs of tights and fill with a selection of the fragrant herbs. These can be tied with pretty ribbon and, when hung below the hot tap on a bath, will produce relaxing, perfumed water

### Build and construct with a wide range of objects

- Give the children a wide range of natural resources and encourage them to think about which ones they would use to create a wildlife hotel. Pallets can be used if stacked on top of one another to create the structure with bundles of



bamboo, bricks, soil, moss and cardboard pushed into each layer to create the "rooms" for minibeasts, frogs and maybe even a hedgehog.

- Challenge the children to create traps to prevent pests from damaging their crops. What pests do they need to capture? How will they collect the pests without them escaping? What will they use to lure the pests into the traps? Solutions might include jam jars with a small amount of milk at the bottom, hollowed out oranges or sticky paper. Ensure that you are not also trapping wildlife such as ladybirds or bees which may be beneficial to your garden.

### Select the tools and techniques they need to shape, assemble and join the materials they are using

- Help the children to create a watering system that will keep their plants watered when there is no-one else available to do it. Provide them with a range of resources, such as buckets or watering cans with holes in the bottom, guttering, tubing



and plastic bottles. Can they work out how to transport the water or regulate its flow?

## Observe, find out about and identify features in the place they live and the natural world

- Cover the bottom of the tray with a layer of compost and then use a range of natural and scrap materials to represent different features of the garden. Suggest that the children represent themselves in the garden using small world figures showing what they like doing the most.
- Encourage the children to come up with a way to record and share everything they are doing in the setting's garden. They might want to keep a journal with lots of drawings and photos. They could create a display board for parents or contribute to a regular newsletter for families. Let the children decide what information they think is most important to share; they might be more excited about a pile of slugs in a homemade trap than their bumper crop of tomatoes!
- Create a 'vegetable-top world' together. The ends of many vegetables, often thrown away in the preparation of food, can be used to create a growing jungle. Place the vegetables tops (such as parsnips, carrots and turnips) in a shallow saucer of water. Soon the leaves will start to sprout creating a magical world for the children to observe.
- Place a map, displayed on the wall, to encourage the children to think about how far their food has travelled. Invite them to collect stickers from their fruit snacks or labels from vegetables brought in from home and stick them onto the relevant countries. Ask them to start to thinking about their own produce in the setting's garden and how this has a less harmful impact upon the environment.

## Identify some features of objects

- Bury a range of natural and man-made objects in your compost heap, for example an apple or flower, or a plastic brick and toy car. Ask the children: 'Which ones do you think will break down to form compost?' Have a look a few weeks later as you aerate your heap to see which objects remain and which have disappeared. Where do the children think the natural objects have gone?

## Begin to know about their own cultures and beliefs

- Try to grow crops that reflect the ethnic backgrounds of the children in your setting. Parents or grandparents may be able to advise and might even be willing to supply

seeds or seedlings. Some plants will be unsuitable to our climate or may need to be kept indoors, such as ginger, which can be successfully grown from a small piece of ginger root.

## Observe and find out about the natural world

- Place a garden snail on a piece of clear Perspex and watch it from underneath to see how it moves along. Put some flour paste near to the snail and tell the children to watch it eating using its mouth (the *radula*). Try this with other animals, such as worms and beetles, and ask the children to observe how they move differently to the snail.
- Experiment making a 'cress head'. Fill the end of an old pair of tights with some compost mixed with cress seeds; form the cut off end into a nose, securing it with an elastic band. Use sticky shapes or pens to decorate the heads leaving the hair area untouched. Place each head in a saucer of water, refilling when necessary. Gradually the cress will start to grow and it will look like hair. When the hair gets very long, supervise the children to give their 'cress heads' a hair cut; the cress can also be a tasty snack. Alternatively, try growing cress in an egg shell or in a coconut with the top removed.
- Pick a selection of flowers on a warm, dry day choosing those plants without woody stems such as pansies, daisies and geraniums. Carefully arrange between sheets of blotting paper and either place in a flower press or use a number of heavy

