Chapter 2

Assessing Your Territory

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So you've decided to become a grow-your-own gardener. You've come to the right book! But before you get started with your crops you need to think about where to grow them because not all vegetables grow everywhere. Farmers grow specific crops in different parts of the country because different crops suit certain areas better than others. You don't need to worry about whether your vegetables meet farmers' exacting standards, but sensible preparation of your site, or matching the needs of a vegetable or fruit with your conditions, does make growing easier and more satisfying. Whether you decide to get an allotment or are restricted to your own back garden, you can choose from a wealth of crops to try and grow.

This chapter delves into preparing whatever site you have available for the fruit and veggies you want to grow.

Making the Most out of Your Back Garden

Not many people have a walled kitchen garden or a spare hectare or two to hand for growing crops. But you can produce worthwhile crops even in a small plot, so don't think you need vast tracts of land to grow your own food. You do need to be more discerning in what you grow and to use your ground intensively, but even if you have no soil, you can still be successful – just use your imagination.

Working with raised beds

Many beginners believe that you can only grow veg if you have raised beds; TV gardeners are never without them! But raised beds aren't essential. What they do provide, however, is a tidy, organised way to grow plants without the need to trample over the soil. Raised beds also enable you to increase the depth of fertile soil (useful when the natural soil in your garden is poor), to organise your space effectively, and even to grow crops on areas of hard surface without any natural soil (make sure you fill these to a minimum depth of 30 centimetres). Raised beds are easy to control and far less intimidating than a whole plot, and are ideal for children to look after. You can also easily cover them with protective fleece and the soil in them warms up more rapidly than soil at ground level, so raised beds are especially suitable for raising early crops. Planting in raised beds is usually intensive and you can plant right up to the edge and spill over the path.

You can make raised beds from wood, brick, railway sleepers, or with lightweight, off-the-shelf, raised bed kits. Although you can construct them to be waist high (useful for gardeners who find bending down to soil level difficult), most raised beds are 15–30 centimetres above soil level (most vegetables need a soil depth of at least 30 centimetres). 1-metre-square beds are practical, but any length or shape of bed no wider than 1.2 metres will enable you to reach across it without treading on the soil. Make paths between the beds about 45 centimetres wide.

You need to fill your beds with some sort of soil. One option is to take soil from somewhere else in the garden, but do make sure that it's good quality. Don't use infertile *subsoil* taken from deep in the ground, for example when digging a pond. Or you can buy good-quality *topsoil* from a garden centre, but make sure to specify that you need it weed free and always check a sample before ordering. Buying soil, however, is an expensive way to fill your beds.

Another possibility is to use recycled compost from your local waste-recycling centre, but this can be high in woody material and may be too free-draining and coarse for good growing. Therefore, recycled compost is best used to add to existing soil to lighten or enrich it rather than as the sole growing medium. Similarly, you can use reduced-peat or recycled multipurpose compost, but again as an additive to the soil rather than to fill beds, because it has low amounts of nutrients and decomposes in the beds, which shrink over a few years. When you've filled the beds they need regular topping up, with garden compost, well-rotted manure, leaf mould or used growing bags. Most gardeners don't dig the soil in their raised beds, but forking it over to incorporate organic matter is still worth doing.

When ready to use you can easily rotate your crops each season, growing root crops in one bed, brassicas in another, and so on (Chapter 3 has more on crop rotation). You don't need to plant in traditional rows but can sow or plant clumps or squares of crops.

Raised beds are naturally very well drained so you need to make sure that they have a source of water or your crops suffer in summer. If your raised bed sits of a hard surface you may need to be especially careful to irrigate them intensively in summer. You also need to maintain the state of your beds and keep any weeds that appear under control (jump ahead to the 'Perennial weeds' and 'Annual weeds' sections for more info).

Gardening in containers: Pot training

You can grow most fruit and vegetables, for a while at least, in containers. Fast-growing salads are the obvious choice, and potatoes are just perfect for containers. A group of pots in a corner of the garden can be productive and attractive and is the sensible option if you don't have much time or space. You do need to buy compost to fill them with, making the crop relatively expensive, but although not the cheapest way to grow crops you can be assured of their freshness, so the cost is worthwhile. Some plants benefit from all the attention you lavish on them in their pots and, because they're likely to be in the warmest area of your garden, perhaps on the patio, tender plants such as basil and peppers tend to thrive. Having your pots near the house saves you having to wander about in the dark for that last-minute bunch of herbs too!

Not all vegetables are very productive, though, and so may not be the best choice for growing in containers. For example, a globe artichoke plant, which needs a container at least 45 centimetres deep and wide and which produces a maximum of only five or six artichokes, isn't a sensible proposition unless you're desperate for garden-fresh artichokes! And the fact that you need to water your crop constantly, and probably feed it too, means that growing in containers isn't always as labour-saving as it first seems.

Because you can fill pots with special compost, you can grow fruit, such as blueberries and cranberries, which need the acid soil rarely found in gardens. The fact that the soil surface is well above the ground is also a benefit when you grow carrots. Their most serious pest is carrot root fly but the adults, seemingly scared of heights, rarely fly more than 45 centimetres above the ground, and so your pots of carrots may well escape damage without any extra effort.

Although many fruit bushes and trees can become large and take up space for a long period, you can use a few tricks to squeeze them into a small space. For example, you can grow red- and white currants and gooseberries in pots and as *standard plants* on a tall, single stem, and grow other plants around the base. You can buy peaches, pears, apricots and apples as dwarf varieties and grow them in pots, too, and against walls and fences. Strawberries, though not without their problems, grow almost anywhere, including hanging baskets and growing bags. So wherever you garden and no matter how small your plot, you still have plenty of options open to you.

Types of container

When growing short-term crops such as salads, carrots and most other vegetables, it really doesn't matter what shape or size of container you use. Recycled containers such as plastic barrels, buckets and tubs are all suitable and though they may not look attractive they are perfectly good enough for your plants. You can even use compost bags. When you turn them inside out, with the black inside showing, the tops rolled down, and with some holes in the base for drainage, they make great containers for growing – especially potatoes! You can even use bags of compost in the same way as growing bags, cutting out on the container altogether if you make sure that you cut slits near the underside to prevent waterlogging.

Terracotta and other ceramic pots look good and their sides offer insulation to roots, but if they are unglazed the sides lose water and the plants need extra irrigation. Make sure that you buy frost-proof pots, which don't break in cold weather: frost-resistant pots aren't frost-proof. Odd-shaped pots with curved sides or incurved tops split after frosty weather if the wet compost expands as it freezes.

Plastic pots are light, which can be useful when moving them around, but is a disadvantage if they contain tall, shrubby plants that may blow over. Their sides are usually thin and so give the roots no protection from frost or summer heat. Modern designs, in many colours, are often indistinguishable from stone or terracotta, and look attractive.

The ideal container for most crops is at least 30 centimetres wide and deep. Whatever container you use, make sure that it has holes in the base for drainage. Although plants need water, none of them flourish if the container fills with water and the roots drown. You can place the pot on a saucer, to help with watering in dry spells, but the pot must have holes to allow excess water to flow away.

Small pots and containers that are less than 15 centimetres in depth dry out infuriatingly quickly, and so are best reserved for baby leaf salads. When you grow permanent plants such as fruit trees, fruit bushes and perennial or shrubby herbs such as bay, which may need to be moved to a bigger pot after a year or two, use containers that have straight sides and are wider at the top than the base or you'll have problems re-potting them. When planting any shrub in a pot, move it in stages from its original pot to its final pot. Small plants often struggle to cope when surrounded by a mass of new compost. For example, if a gooseberry is in a 20-centimetre-wide pot, plant it in a 30-centimetre pot for the first year or two, move it into a 40-centimetre pot, and then into a final, larger pot. Apples and other tree fruit eventually need half barrels or other large containers.

Types of compost

For most vegetables you can use a basic multipurpose compost. However, paying for a good-quality compost rather than the cheapest is always worth the expense. Most composts are based on peat or, increasingly, contain a proportion of recycled materials or are wholly composed of recycled materials. All these composts gradually decompose in the pot but are suitable for several crops, over a period of about a year.

After filling, you can grow an early crop of salad leaves and, after you pull them up, grow a crop of maincrop carrots for harvesting in autumn. The following year you need to replace the top layer of compost but after that remember to replace all of the compost. You can use the discarded compost as a mulch or planting compost in the garden so you put it to good use. These composts contain enough nutrients for about four weeks of growth, unless otherwise stated on the bag, so you'll need to feed your plants after that period (see Chapter 5 for more about keeping your plants well fed and watered).

Plant anything that will be in a container for more than a year, such as all fruit bushes, trees and shrubby herbs, in a soil-based compost such as John Innes compost. These loam-based composts don't decompose over time or lose their structure, so keep the roots healthy, and their heaviness gives the tall plants stability. Loam-based composts also retain nutrients better, so regular feeding, though beneficial, is not so vital.

Growing in bags

Growing bags were originally developed for commercial growers of tomatoes, and are now very popular with home gardeners. They vary greatly in price and quality, with the cheapest bags containing poor compost – and not much of it! Growing bags are suitable for tomatoes and peppers but the small volume of compost means the plants can dry out fast in summer so water them with extreme care. Unless you buy premium-quality bags, the plants will also need feeding three weeks after planting because they contain few nutrients. Remember also that you need to provide the right growing conditions for your plants so you can put the bags outside for tough crops or in the greenhouse if your plants need more warmth. The other thing to remember is to limit the number of plants (no more than three tomatoes or two courgettes per bag, for example) so they have enough room for roots and tops to grow.

Nurturing vertical gardens

If space is really at a premium, don't forget that you can use vertical spaces for lots of crops. Hanging baskets and window boxes are perfect for this but you can also, with some ingenuity, hang up growing bags, cutting holes in the sides for plants. You can even use large catering tins, banging holes in the base for drainage, attached to trellis or fence posts. A sunny wall or fence is best for most crops but remember that the reflected heat from a wall dries out pots and baskets quickly so you need to pay particular attention to watering. A west-facing wall may be more successful than one that gets sun all day. Small baskets and other hanging containers, with small volumes of compost, dry out more rapidly than large containers.

Small, short-term plants are the best choices for hanging baskets and window boxes and any multipurpose compost suffices for these plants. You can buy special container compost that usually contains both controlled-release fertiliser and water-retaining gel to help prevent the compost drying out so quickly. You can buy both these products and add them to ordinary compost if you prefer. Unless you're able to water frequently, investing in an automatic watering system run from an outside tap is worth consideration. These systems, controlled by a battery-powered, computerised timer, aren't expensive and are useful for your containers too, taking the worry out of watering.

Ideal crops for hanging baskets and window boxes include:

- Bush and trailing tomatoes
- Most herbs, especially thyme, parsley, sage, basil and chives

- Leafy salads, including lettuce, rocket and baby leaf endive and chicory
- Strawberries

Growing under Cover

One factor you can't rely on when gardening is the weather. A greenhouse or polytunnel allows you to control growing conditions a little, which means that you can produce plants and grow crops that are unreliable outside. The other benefit is that you can get gardening early in the season and when the weather is too cold or wet to do much outside.

Growing in a greenhouse

Growing under cover expands the range of plants you can grow and extends the growing season. Even in an unheated greenhouse you can grow tomatoes, peppers, aubergines, cucumbers and other summer crops with greater reliability, and the possibility of fresh grapes, peaches and nectarines becomes a reality. You can also raise your own plants more easily and reliably, which gives you control over what varieties you grow.

Size matters

Always buy the biggest greenhouse you can afford or can fit into your plot. First, you're sure to fill your greenhouse quickly, with crops or ornamentals, especially if you heat it in winter, and second, maintaining good growing conditions is far easier in a large greenhouse than a small one. Small greenhouses get very hot in summer and excessively high temperatures can damage plants.

Siting your greenhouse

Ideally, choose an open, sunny spot for your greenhouse. Although you may want to hide it for aesthetic reasons, placing your greenhouse under trees or beside a hedge limits light and thus plant growth; in addition, you run the risk of falling branches damaging the structure. If you want to heat the greenhouse with electricity you need to place it near your main dwelling.

If the axis of the structure runs north/south, both sides get equal light; if it runs east/west, the south side is sunnier and the whole house is generally hotter in summer.

If your greenhouse is made of glass, be aware that stray balls and children may pose a risk to safety.

Cold frames

Cold frames are mini-greenhouses that make a useful addition to a greenhouse. You can use cold frames to acclimatise your plants to outside conditions in late spring and also for growing early and late crops of salads. Cold frames vary in price and materials – look out for wooden sides or 'twin-skinned' polycarbonate glazing, which retain heat better than aluminium and glass or thin plastic.

Other things you need

Most greenhouses include only minimal roof vents. You need to buy extra to make sure that you can keep the greenhouse cool in summer. Adding louvre vents at the base in a few places aids air circulation. Adding automatic vent openers (which need no power supply) also makes life easier because they ventilate your plants even when you're not there. You also need staging, at least in some places, so that your young plants are easier to tend. A supply of water is essential, and a heater of some kind and a propagator enable you to raise your own plants, saving money and gaining satisfaction. Finally, you also need pots and trays.

Growing in a polytunnel

If you take the plunge and decide on a *polytunnel* (a hooped, temporary structure clad in flexible polythene), you won't regret your decision. Some plants grow better under plastic than in a greenhouse and even on a cold, windy spring day you can feel as if you're in a different country in your polytunnel, protected from the wind. Polytunnels can be cold in winter because they aren't insulated and are not airtight, so heating them isn't practical, but they warm up quickly in spring.

Planning for your polytunnel

When choosing your tunnel, consider the following:

- **Buy the biggest polytunnel you can afford.** They come in various widths and a tunnel measuring 3 metres or more in width is most sensible. Smaller polytunnels are available but the minimum practical size is about 2.4 x 2.4 metres. You need a path down the middle and this size leaves sensibly wide beds both sides. Some polytunnels have more vertical sides than others and these allow more growing room.

- **Choose a tunnel of strong construction.** Allotment sites can be windy. The polythene 'skin' of polytunnels generally needs to be replaced after three to five years. You can choose from various grades and qualities of polythene and, because re-skinning is a chore, the less often you have to do it, the happier you'll be. Cheap models may be a poor investment, so choose the best quality.

  The polythene is usually held in place in a trench around the outside, weighted down with soil. Make sure that you leave an area around the tunnel so you can replace it. Some polytunnels are fixed with wooden battens and these are slightly less work to fit and replace.
- **Avoid siting the tunnel near regular bonfires because falling hot ash can damage the cover.**
- **Ensure that the door is wide enough to get a barrow through.**
- **Make sure that the tunnel has a door at both ends, for ventilation in summer.**
- **Site your tunnel near to a source of water, because you need to irrigate your crops, especially in summer.**

Advantages of a polytunnel

You can find yourself enjoying these benefits after investing in a polytunnel:

- Polytunnels are generally much cheaper, size for size, than a greenhouse and, as temporary structures, they are allowed on sites where permanent buildings aren't permitted.
- Polytunnels provide less trouble with watering because you're planting in the soil rather than in pots.
- Polytunnels can be used as a greenhouse to raise tender plants and to dry off and ripen onions, garlic, drying beans and other crops.
- Polytunnels are useful for giving some frost protection to stored root crops in winter.
- Polytunnels are perfect for growing peaches and nectarines. Growing under cover, peaches and nectarines are much less likely to suffer from the common peach leaf curl disease and are more likely to be healthy and productive.
- Polytunnels allow you to grow a wide range of crops – many that can be grown outside and all those you'd normally grow in a greenhouse.
- Polytunnels are warm in spring, hot in summer, and their humid atmosphere suits a range of crops that struggle to thrive outside in the average summer, including:

- Aubergines
- Chillies
- Cucumbers (if shaded)
- Peppers
- Tomatoes (that need to be free from blight, which often affects plants outside).

You can also try more exotic crops:

- Cape gooseberries (physalis)
- Grapes and kiwi fruit (actinidia) that are more likely to produce a worthwhile crop (if you've room for permanent plants)
- Melons and pepinos
- Sweet potatoes
- Tomatillos (for salsa)
- Yard long beans.

✓ Polytunnels enable the soil to warm more quickly and stay warm longer, as well as providing protection from the wind and rain, which helps you to extend your growing season at both ends (see Chapter 3 for more about the planting calendar).

Growing indoors

Although greenhouses make growing crops and raising young plants much easier, if you don't have one you can grow seedlings inside your home instead. Indoors, you need to make sure your seedlings get as much light as possible, so delay sowing until March at the earliest, when the sun is getting stronger, and use a heated propagator to provide a stable temperature for seedlings. The process of *hardening off*, or getting the plants used to outside conditions, is very important because indoor-grown plants are very soft and tender and need special care.

Lack of light can be the biggest problem with growing plants indoors – even a bright windowsill doesn't give young seedlings as much light as they need – and seedlings can grow spindly, especially if you're tempted to sow too early.

Getting your Share of Allotment Gardening

Many gardeners aspire to renting an *allotment* – a plot of land that you rent for growing your crops. Dreaming of the camaraderie, cups of tea, chit-chat and large areas of soil to cultivate is a wonderful idea. But vacant plots aren't always the fertile oases you may expect. Although you can try to keep the workload down to a minimum, an allotment can quickly become a tie and a chore so be prepared for some hard work. However, the rewards are considerable and an allotment enables you to grow crops that just aren't sensible on a small plot or in an average garden, such as cardoons and the related globe artichokes, Jerusalem artichokes, asparagus, rhubarb, and large quantities of soft and tree fruit. With a large area of land to cultivate you can grow some crops in large quantities, enabling you to stock the freezer and turn your garage into a winter larder. And who knows, you may even be able to live *The Good Life* and become self-sufficient in most of your fruit and veg needs!

Acquiring your plot

You can get an allotment in various ways – your local or parish council office, library or residents' association are good places to start. Alternatively, you can just wander down to your local allotments and enquire there.

Most people rent a plot for a year, but unless you neglect your plot or cause a nuisance rental is automatically extended. Rents vary from as little as £20 a year to over £100, often depending on the facilities at the site. Waiting lists are common, but if you're lucky enough to get a plot immediately, get in now!

Choosing your plot

When you get your allotment plot you may have no option but to take the only vacant one. If you're lucky enough to have a choice of plots, however, consider the following and choose wisely – it may make life much easier for you:

- **Look out for pernicious, perennial weeds if you get to look over potential plots in summer.** Avoid, if possible, land with severe infestations of bindweed, ground elder, creeping thistle and, in particular, mare's tail. These weeds make growing conditions difficult for your crops. (See the sections 'Perennial weeds' and 'Annual weeds' later in this chapter for more about weeds.)
- **Put a spade into the soil and assess the soil.** Clay soils are harder to dig and not as good for root crops, though they do suit some crops well, such as cabbages and cauliflowers. If you dig up lots of old metalwork you may have a plot that hasn't been cultivated for ages and it will take longer to get into a workable, fertile state.
- **Choose a plot near to a tap, if available.** The location saves you a lot of legwork in summer.
- **Avoid plots situated next to obviously unkempt plots.** Weed seeds and roots are more likely to invade your site.
- **Avoid plots that are overhung by trees or close to hedges.** Competition from tree roots and the lack of light reduces the productivity of your site.

A shed, greenhouse or polytunnel, even in a poor state, is a useful addition to your plot. Because these structures are temporary you should have no problem putting one up, but do check the rules on your site.

Divvying up your plot: Deep beds or raised beds

You need to decide how to divide up your plot. You may choose to divide it with grass paths or cultivate the whole area. For the purposes of crop rotation (see Chapter 3) dividing the plot into three or four equal areas is the easiest, but not necessarily the most practical, way forward. Most people cultivate the soil regularly and find digging is good for their crops and good exercise for them, but some believe that making deep beds or raised beds is more rewarding.

Deep beds are beds that have lots of organic matter added to them and are then heavily mulched so that worms do the work of turning the soil, and the paths between the growing areas are permanent, often covered with old carpet or straw. This approach works well with some crops but worms are intrinsically lazy and, apart from in cold or dry weather, don't burrow deep into the soil, and so they're not as effective at getting organic matter into the depths of the soil as you and your spade. Deep beds usually don't have permanent, defined sides like raised beds (see the 'Working with raised beds' section earlier in this chapter). Because of this they're more messy and so are more suitable for allotments than your own garden – unless you have lots of room.

Avoiding common allotment pitfalls

Many people who've tried their hand at allotment growing – myself included – have got things wrong occasionally. In this section I list some of the more common mistakes so that you can be wise to them before you get going.

Taking on too much land

You're probably filled with enthusiasm when you first take on your allotment, but you may discover that it takes up more time than you can afford. If the plot is wild and unkempt, focus your efforts on one manageable area. Cover the rest of the plot with carpet or weed control membrane, or spray with weedkiller, for the first season so that the ground is ready to use the next season (see the 'Clearing Old Plots' section later in this chapter). Starting with a small plot, and wanting more room, is better than your plot becoming a burden.

Planting too quickly

Making sure that you clear your planting area well before putting in your first crops is especially important with perennials such as asparagus, or fruit such as raspberries and strawberries. Clearing away and killing weeds is much easier if the ground is free of crops than trying to hand weed or dig out weed roots among your plants. Clear a small area carefully so you can grow some crops early in the first season, but then concentrate on getting the rest of the area completely free of perennial weeds for the remainder of the first season.

Growing what you don't eat

You may find that you get carried away when you're looking through catalogues or trying to fill out a planting plan and end up growing lots of crops just for the sake of it, instead of growing food you actually enjoy eating. Having your plot filled with crops all year round is good use of your land, but is of little use if you're not going to use them. If you're not going to use an area for a few months, sow it with *green manure* (plants or mixtures of plants that you sow on bare pieces of land and dig into the soil before they flower) to improve the soil. Avoiding famines and gluts of crops isn't easy, but being strict about how you treat all those spare seedlings and trying to sow little and often helps you avoid having to give away armfuls of cauliflowers and courgettes to friends who really never want to see one again!

Inheriting pests and diseases

In the garden, where a wide range of plants grows and where you may not have grown vegetables before, you're unlikely to inherit a large pest and disease population. But on an allotment, where crops have grown for decades, reservoirs of problems may be present – on neighbouring plots if not on your own. Some pests, such as brassica whitefly, and diseases such as downy mildew and leek rust that spread rapidly when conditions suit them, are inevitable on your plants if they are present on adjacent plots.

You'll quickly discover your local problems and need to be ready to spray or, where possible, choose resistant varieties. (See Chapter 7 for more info about pests and diseases.)

Inheriting fruit bushes

You may think that inheriting some fruit bushes and plants on your new plot is quite a bonus, but they may not be as good as they first look. Most soft fruit bushes have a limited life, especially raspberries and strawberries, and blackcurrants may also be infected with virus. Take the first year to examine these bushes and plants carefully and assess their health. You may be better off removing them and starting again, but don't put new plants of the same type in the same position on the plot for at least a couple of years. Of course, you can plant other – different – fruits or veg immediately.

Here are the things to look for on fruit bushes and plants that you inherit:

- **Blackcurrants** suffer from *reversion virus*, which causes the leaf shape to alter from five-lobed to three-lobed and reduces crop yields with shorter clusters of fruit. Reversion virus is spread by a mite that overwinters in the round, enlarged growth buds. Affected plants can't be cured.
- **Plums** must never be pruned in winter or airborne spores of *silver leaf disease* may infect their cut surfaces. You can identify this disease, which reduces yield, by the silvery sheen to the foliage. No cure exists.
- **Raspberries** suffer from a wide range of problems. The most serious is *virus infection*, which is spread by aphids and causes yellow mottling of the leaves and stunted growth with low yields. This condition is different from chlorosis, which is yellowing of the leaves but with green veins. Chlorosis is caused by the soil being too alkaline (in other words, the soil contains too much lime) and can be countered by adding organic matter or sulphur to the soil. Raspberries also suffer from cane blight, which causes dark marks on the stems and then dieback. No cure exists.
- **Strawberries** suffer from a virus (for which no cure exists) that causes mottled foliage and reduced crops. Strawberry beds also get crowded because of young plants on runners (known as *creeping stems*) and crowded plants don't crop well. As a general rule, you need to replant strawberries every three years.

Dealing with attack

You aren't the only one waiting for your first tasty currants, sweetcorn and cabbages. In addition to insect pests that quickly descend on your young plants, bigger critters appreciate your efforts, too. Especially susceptible crops include peas (which pigeons eat as soon as they emerge – if rats and mice haven't eaten the seeds first), brassicas in winter (which pigeons devastate), and most fruit, especially strawberries, currants and blueberries,

which blackbirds devour as they ripen. You also need to keep rabbits out of your plot and rats may attack crops, such as sweetcorn, especially in late summer. I offer you my tips for protecting your crops against particular pests with each veg and fruit entry in this book and give more detailed advice in Chapter 7.

Clearing Old Plots

If you're one of the lucky ones, you may rent a clean plot that has only just been vacated. But you're more likely to take on a plot containing a mass of weeds that makes your heart sink. The biggest mistake you can make is to dot your plants around in small cleared areas, thinking that weeds that have grown for years will give up and die just because you've arrived on their patch.

All weeds are a nuisance but they can be grouped into two types – perennial and annual – according to how long they live. You're likely to have both types of weed on your allotment and understanding the two types gives you a better chance of beating them.

Perennial weeds

Perennial weeds live for more than one year and have underground roots or stems that enable them to live from one year to another. They can survive neglect and compete with grass, and so are the weeds that greet you on neglected plots. Their underground stems give them the potential to grow again even if you chop off the tops or spray them with a contact weedkiller.

You can simply dig up some perennial weeds but others grow back from small parts of plants left under the soil. However, because they can't withstand persistent cultivation of the soil, these weeds gradually decline after you've cleared the plot and have it under control.

Veg that becomes a weed

Some vegetables, especially the more unusual types, can become weeds. Years ago I planted giant spinach and left it to seed. For years afterwards it appeared all over the garden. Bloody dock can be a similar problem and even leaf beet can seed everywhere if you leave bolted plants to mature. You may also find that lamb's lettuce and land cress turns up in unexpected places, so beware – you may find that you have more of a particular vegetable to eat than you first expected!

Perennial weeds to get rid of include:

- **Mare's tail** is possibly the worst weed of all and often a sign of light, sandy soils. Growth is narrow and leafless, looking like slender Christmas trees. Weedkillers aren't especially effective on mare's tail's waterproofed cover, and the exceptionally deep roots mean that it's impossible to dig out. Elimination of this weed is unlikely but you can manage it by spraying, pulling out and hoeing as often as you can. The slender leaves mean that mare's tail isn't the most harmful of weeds – just the most persistent.
- **Ground elder** is a destructive weed that spreads quickly, and the brittle white underground stems break as you dig them up. Even small pieces make new plants that form a dense carpet of bright green leaves that smother other small plants and airy clusters of small, white flowers. Knowing that ground elder was originally introduced as a vegetable itself is of no comfort when you're struggling against this weed!
- **Couch grass (twitch)** often invades plots from grass paths, and has sharp-pointed underground stems that spear carrots and potatoes. Removing couch grass by digging makes for hard but effective work.
- **Creeping thistle** is the most common thistle and has small, mauve flowers and very spiky leaves. Creeping thistle is tall, sends out white, underground stems to colonise new areas while growing and flowering, and smothers most crops.
- **Bindweed**, both white-flowered bindweed (or *bellbine*) and the smaller pink-flowered field bindweed, have brittle, white underground stems that snap as you dig them up and grow into new plants. The twining stems grow up around and strangle taller plants. Bindweed is almost impossible to dig up completely.
- **Stinging nettles** are usually considered a sign of good, rich soil. They spread by horizontal stems to cover large areas but are easy to dig out, if you wear gloves. Stinging nettles are a useful food plant for many butterfly caterpillars so you may want to leave a clump in place.
- **Bramble** is a woody weed that spreads by bird-dropped seeds and by arching stems that root as they touch the soil. Weedkillers are effective but leave behind a tangle of dead, brittle stems, and so manual clearance is essential.
- **Japanese knotweed** is a vigorous, large weed with tall, cane-like stems that colonise any soil and shade out all other plants. Its woody root-stock is difficult to dig out. You can have a go if you're feeling strong but be aware that you must never dump the roots on wasteland or they'll just re-grow! Japanese knotweed does succumb to repeated use of systemic weedkiller, so can be beaten.

Impeding perennial weeds

You have several options available to help you clear your weeds and keep them under control.

Mulching

A *mulch* is a layer that forms a barrier between the soil and the air. You can use mulches to retain soil moisture and to suppress and control perennial weeds by depriving them of light, weakening and eventually killing them. To do this you need a fabric mulch that is impenetrable to shoots. You can buy black landscaping fabric and hold it down on the soil around the edges with soil or with old tyres or bricks. You can also use old carpet. (Ideally avoid using foam-backed carpets because the foam deteriorates and may mix into the soil.) Loose mulches such as composted bark or lawn mowings (see Figure 2-1) are good around crops because they retain moisture, but perennial weeds do grow through them. If applying mulches in summer you need to chop down the growth first.

When you apply a mulch to suppress weeds, ideally leave it in place for a full year to ensure that all the tough perennial weeds have been well and truly killed.

Figure 2-1: Laying grass cuttings on top of newspaper makes a good mulch around crops.

These mulches retain some soil moisture but may also encourage slugs.

Digging

If you're feeling active you can attempt to dig up your perennial weeds. This method is necessary and effective for brambles and nettles but for weeds with a network of underground stems, such as ground elder and bindweed, you're unlikely to remove all the pieces of root. The problem is worse in clay soils where the soil remains in clods and is difficult to break up. In some cases, when the soil is parched and the roots are more flexible and less prone to breaking, you may be able to fork out the roots, but in these conditions clay soils are almost impossible to dig.

Don't put perennial weed roots into the compost heap unless you lay them in the sun to wither until dead or place them in a bucket of water so they rot first. If you don't do this, you'll be seeing them again pretty soon.

Weedkillers

Although most weedkillers don't affect the soil or your plants, the two basic types available aren't selective so it's a good idea to keep them off your crops' foliage.

The two basic types of weedkiller are:

- **Contact weedkillers** may be based on natural fatty acids and are suitable for organic growers. They act by dissolving the waxy coating of leaves and allowing the plant to dehydrate. They only affect the parts directly sprayed and don't have any direct effect on the roots of the weed. They are most effective against annual weeds.
- **Systemic weedkillers** are sprayed on the weeds, absorbed by the foliage, and move within the plant to affect the roots. In many cases they kill the plants completely. Systemic weedkillers are also effective against all annual weeds. Because of their mode of control, these weedkillers generally work slowly as the chemical is moved throughout the plant, but you can also buy combination weedkillers that combine the activity of several chemicals to give a quick and more lasting effect. Be careful, though, because these combination weedkillers, and all weedkillers except lawn weedkillers, aren't selective and kill any plant they come into contact with. However, most aren't absorbed through bark so you can spray them around dormant shrubs including fruit bushes and trees as long as you're careful not to spray the leaves of the plant.

I don't recommend that you ever use path weedkillers on land that you're using to grow crops because they aren't selective and they prevent the germination of all seeds, including vegetables and flowers. Most weedkillers, though, have no or little effect on the soil and in many cases you can plant or sow crops immediately, or within days, of spraying.

Be careful when using weedkillers. Remember to read the warning in the weedkiller section of 'Impeding annual weeds' later in this chapter.

Annual weeds

Annual weeds grow quickly but, because they need bare soil to grow, can't compete with a dense cover of perennial weeds. They tend to be more common on cultivated soil. When you remove the cover of perennials you find that seeds, which have been dormant for years in the soil, start to grow. The constant turning of cultivated soil and the lack of permanent plant cover suit annual weeds perfectly.

Removing or killing annual weeds before they set seed is vital or the problem increases each year. Not all annuals take a full year to develop and set seed; some can reach maturity and seed within a few months. Annual weed seeds most commonly germinate in spring, as the weather warms, and in late summer when the soil is warm but increasing moisture at the soil surface enables them to grow. Some may be killed by frost but the majority survive, as small seedlings, to grow quickly in spring.

You'd do well to banish annual weeds from your plot because all the time they remain they'll compete with your plants for light, water and nutrients. Here are some of the most annoying annual weeds:

- **Groundsel** is a quick grower with small, yellow flowers. If the weather is cool and wet, groundsel has the ability to set seeds even when hoed off.
- **Chickweed's** tiny, delicate seedlings rapidly spread to form dense carpets of pale green with small white flowers. This weed seeds profusely and the brittle stems snap when pulled up, allowing the roots to sprout again. Cucumber mosaic virus, which affects courgettes, overwinters on this weed. Chickweed is quite tasty as a salad.
- **Goosegrass (cleavers)** has small seedlings that rapidly turn into tall, branching plants that clamber over other plants. Natural 'Velcro' makes the leaves and large, round seeds stick to clothing. Goosegrass rapidly swamps your crops.
- **Annual meadowgrass** is a small grass that germinates in autumn and forms lawns that seed in spring. The plants then die off in summer. This weed can be a real problem in seedbeds.
- **Bittercress** is a weed that grows, flowers and seeds in a few months. The seeds are ejected from the seedpods following the small white flowers. Bittercress can easily get out of control and cover the ground, and it also grows and seeds in the poorest soil.
- **Purple deadnettle** is a pretty weed with attractive, mauve flowers but can quickly form large colonies that smother early crops, particularly when at its worst in spring. You may want to leave purple deadnettle in wild areas because it's a nectar source for bumblebees in spring.
- **Annual nettle** has the same sting as its perennial cousin but is smaller and seeds prolifically, forming carpets of stinging leaves.

- **Galinsoga (gallant soldier)** is a large, rangy weed that has hairy leaves and yellow and white daisy-like flowers; it thrives in drier soils, mostly in the south of England.

Impeding annual weeds

You can choose from a number of methods to control the annual weeds that sprout up on your plot.

Mulching

You can control annuals with a thick mulch of organic material. This method prevents seed germination or forms a dense barrier that weeds can't push through as they grow. Ideally, you need to make this mulch 8 centimetres deep. Such a thick layer isn't practical around all crops but is suitable for fruit trees, bushes and many long-lived vegetables such as asparagus and Brussels sprouts. Well-made garden compost, bark and mushroom compost are all suitable. You can also use grass clippings from the lawn, on their own or laid over newspaper as an efficient and free mulch.

Stale seedbed

A *stale seedbed* is an effective method of controlling annual weeds and giving your vegetable seedlings a fighting chance against annual weeds. Prepare the area for sowing as usual and cover it in clear plastic sheet or *horticultural fleece* (a thin cloth available in garden centres). Peg down the plastic sheet or fleece and leave the area for several weeks, during which annual weeds grow in great numbers. When you remove the cover, lightly hoe off the weeds or spray them with a contact weedkiller. In this way you remove many of the viable weed seeds in the surface of the soil and reduce germination when you sow your vegetables in the area, as long as you don't disturb the soil surface too much.

Hoeing

Although it only has limited use against perennial weeds, hoeing is the traditional, fast method of killing annual weeds (refer to Chapter 1 for a description of the different types of hoe). Pushing or pulling the blade of the hoe through the soil, just below the surface, cuts the tops off the roots, which are then unable to make new growth. In addition to killing weeds, hoeing can actually prevent seeds from germinating. Regular hoeing keeps the surface of the soil dry and dusty, which acts as a mulch; the lower levels of the soil are therefore kept moist and seeds prevented from growing in the dusty surface. Hoeing is most effective when the soil is dry and on a hot, dry or windy day because the weeds wilt and stand no chance of rooting again. Although hoeing is not very effective against perennial weeds, it does have some effect – if you constantly remove the tops from a plant it eventually weakens and dies.

Hoe off weeds before they flower and set seeds. If the weeds are small you can leave them on the soil surface to dry out and die, but if they're larger, raking them off and adding them to the compost heap is better and neater.

Hoe with care around your crops. You can hoe along rows and hand weed among the plants. Short-handled hoes help in these cases, enabling you to see exactly what you're chopping off.

Hand weeding

Pulling up weeds by hand is laborious but sometimes the only way to remove them, and usually the only way to kill weeds along rows of crops. You can use a hand fork or trowel to help lift the roots of stubborn weeds and to remove any perennials you find along the rows. The job is easier on a dry day and when the weeds themselves are dry. You can add the weeds to the compost heap unless they're setting seed.

Weedkillers

Although you can use systemic weedkillers (where the chemical kills the weed gradually from within) they aren't necessary for annual weeds. Instead, you can effectively use contact weedkillers (where the chemical begins to kill the weed on contact), including organic products based on natural plant fatty acids. Many work quickly but aren't selective and must be kept off the foliage of valuable plants. Their continued use may result in compacted soil and accentuate moss growth, so they aren't a complete substitute for hoeing or other methods of cultivating the soil.

Always wear protective clothing such as gloves, goggles and a simple face mask when handling any chemicals and use weedkillers only on still days, avoiding windy conditions when spray may drift onto valuable plants or neighbouring plots. Like all garden chemicals nowadays, weedkillers are extensively tested and, providing you remember these rules and follow the instructions, they pose little or no hazard to you or to bird or animal life.

Manufacturers are also making weedkillers easier to use every year. In addition to concentrates that you need to dilute, you can buy ready-to-use sprays that save you time. Ready-to-use sprays have been formulated to have a long shelf life, but if you dilute concentrates you must use the spray immediately. Try not to mix up more spray than you need but if you do, pour or spray the excess on a spare piece of ground. Never make the spray stronger than recommended, adding a bit for luck.

Don't ever risk making up and using your own home-made chemical weedkillers. Not only are they unlikely to be effective, they are also strictly illegal.

Digging

Because annual weeds don't have the capacity to grow from the roots, you can clear the soil of them by digging them into the soil. Doing this actually adds humus and nutrients to the soil and is really a form of green manure. You can also use a rotary cultivator to incorporate them into the soil, but be sure to catch them before they set seed or you're simply burying the problem for another year.

Fire

Although it may seem extreme, you can use fire to kill weeds with a gas-powered weeder. These run on cans of gas and are easy and safe to use but you must be careful in hot, dry conditions that you don't set light to dry materials. You don't need to burn the weeds to a crisp; in fact this makes the job slow and expensive. All you need to do is lightly scorch the weeds so the cells are damaged and they collapse. Using fire in this way is most effective on small weeds.

Weeding paths

Many site's plots are divided with grass paths, which as well as needing occasional mowing can also be a source of weeds such as couch grass and mare's tail. So, in addition to keeping paths in good order, leave a strip alongside them that you can periodically spray with weedkiller to prevent weed encroaching on your plot. You may also want to make paths through your plot; old carpet (without foam underlay) is ideal for this or you may want to use straw that you can dig in at a later date. Straw may encourage slugs but is a good soil conditioner and a cheap path material if you can obtain it locally.