Chesham Town Council
Chesham Allotments Group

Allotments Induction Welcome Pack

Contents

Allotments are part of our heritage, supporting local food production: their history goes back over a thousand years where the Saxons on clearing an area would hold land in common. In the late 1500s, during the enclosure of common land, as compensation to commoners allotments of land were attached to tenant cottages. It's at this time that allotments are first mentioned. In modern times the key legislation was the Small Holdings and Allotments Act of 1908, replaced by the Allotment Act of 1950. Allotment numbers peaked in 1943 at 2.4 million and declined to around 0.5 million in the 1970s. There were an estimated 297,000 plots in 1996 and it is hoped that the increase in demand will lead to a growth in the provision of more allotments given that allotments are enjoying a renaissance. Having been out of favour for many years and lost in their tens of thousands to developers, many sites currently have long waiting lists.

As a newcomer you are participating in a traditional activity with a long history and there is support to help you get the most out of your plot. The purpose of this document is to help you get started and provide guidance on where to get support. You must recognise that, as in all things in life, the more effort you put in the greater the benefits and with regard to allotment gardening, you should be under no illusion that it will involve some hard work. To ensure long term success it pays to take essential early steps.

What to do whilst on the Waiting List

Allotments are allocated to new tenants as half plots: these are equal to approximately 5 poles and a pole is equal to 25.3 square metres, so a *half plot is equal to 126.5 square metres*. Before taking over a plot it is worth reviewing this guidance and thinking about your plans, your goals and the time you have available to manage the plot. Time spent here will help you to successfully manage the allotment once it has been allocated by the council. Below are listed some ideas on what you can do before getting an allotment. If you have a garden, allocate some of the space to grow vegetables for a vegetable patch or consider growing vegetables in pots in a patio. Or you can create space in the borders for example growing tomatoes or other ornamental vegetables (cabbages, lettuces) instead of shrubs. Below are some examples of an actual member's experience.

- Tomatoes can also be successfully grown in pots or growbags and sometimes growing them in the confines of the garden or adjacent to a wall or fence helps protect them from the dreaded blight (blight is a very common disease of both potato and tomato. It causes leaf spots and tuber blight on potato, and leaf spots, fruit rot and stem lesions on tomato).
- Lettuces can be grown in a flower bed and can look quite decorative as an edging plant, especially some of the Italian varieties.
- The following vegetables have been grown in pots, with varying degrees of success

  - ✓ The runner beans have been successfully grown putting 12 plants in a large pot with about six 7ft canes and have had a great crop.
  - ✓ The Borlotti beans produced a good crop
  - ✓ Mange tout was a bit slow to start with but are now producing quite a fine crop.
  - ✓ The carrots were very productive and are ideal grown in pots as it lessens the chance of carrot fly.

Tip. carrots do not grow well on the allotments in Chesham and are best grown in containers

- ✓ Parsnips grow well in a pot,
- ✗ The peas were not such a success.

Other things to try in large 'redundant' pots are potatoes: some members have had really good yields from their pots. It is amazing what you can achieve in such a confined space; anyone who is a customer of the Waterside Fish & Chip bar will know exactly what I mean. They have allocated most of their back yard for the growing of vegetables and also have window boxes.

So, for all you who may not have much practical experience of growing foodstuffs, I really recommend trying out a few crops at home while waiting for an allotment to come free. Hopefully, not only will you have some delicious home grown vegetables but you will also learn about planting times, which crops can survive through frosts, common pest and diseases and how to deal with them, as well as something about the fertilisers to feed your plants.

Societies & Groups

Chesham Allotments Group

The Chesham Allotments Group works with Chesham Town Council to maintain the three allotments sites and is also happy to offer horticultural advice to tenants. The group reports to the Recreation and the Arts committee. The group is self funding and organises a number of events to build the community and to support the council in the maintenance and the development of the allotments.

On Saturday the group organises Coffee Mornings at the Focal Point Plot 38A at Cameron Road allotments. (Entry is by the recycle bins gate on Cameron Road). They run from mid April through to mid October regardless of weather from 10:00am to 12:00pm. In addition the group organises a number of social events throughout the year on and off the site.

An open meeting is held in April at the Town Hall where all Allotment Holders are invited to attend and have the opportunity to comment on or ask questions relating to the Cameron Ashridge road allotment sites.

There is an Open Day on the allotments each August, when members of the public can come along and find out more about allotment gardening. To keep members up to date on the latest events a quarterly news letter is produced, "The Grower". This contains topical comment, articles from Allotment Holders and an events calendar. An important function of the group is to work with other local societies with a shared interest: it has links to the Chesham Horticultural Society and the Chesham In Bloom Committee. An AGM is held in September that is open to all Allotment Holders where prizes are awarded for the best kept allotment full plot and small plot, and best new tenant at Cameron/Asheridge Road sites. The Chesham Horticultural Society provides the judges for the competition.

A committee runs the group and membership of the committee is open to all Allotment Holders at the AGM. The committee meets 6 times a year. If you wish to join as a Representative, or apply for an Officer position please contact any of the Committee Member or Chesham Town Council.

Chesham Horticultural Society

Chesham Horticultural Society was established in 1913 and is an active and thriving Society running annual horticultural shows in July and September. The Society sells seed potatoes, onions, compost, fertiliser and other gardening essentials from its Trading Hut in Cameron Road (February to end of May), runs a plant sale in the spring, and organises three outings a year to popular gardens and horticultural shows. The annual social event is free to members and everyone is invited to the AGM.

Membership costs just £1 per year for which members receive three newsletters a year plus access to all the Society's events and the Trading Hut. To join please contact Chesham Town Council for details

Tenancy Agreement

The Tenancy Agreement details the terms and conditions subject to which Allotment Gardens are let by Chesham Town Council to an Allotment Holder, who will be fully accountable in cultivating and maintaining their allocated plot and communal pathways.

In support of the Tenancy Agreement the Allotment Gardens are subject to four inspections per calendar year, monitored by the Parks and Premises Manager, assisted by Chesham Allotments Group Officers, and members of the Recreation and the Arts Committee (Chesham Town Council).

Tackling a New Allotment

Media hype about allotments often glosses over the less glamorous, repetitive and often physically demanding jobs involved in the care of an allotment. All too often the hopes and aspirations of new plot holders end up in the compost bin or despair when rabbits eat the salad crops, cabbages become victims of pigeons and weeds choke the life out of any remaining crops. To avoid such disappointment it is vital to take early and essential steps which will lead to a rewarding long-term future. Before you start cultivating your new allotment, you will need to plan how much time and money you have to spend and, if necessary, consider what help and other resources you may need. Therefore time can be well spent with a cup of tea and a pen and paper noting the size and any existing features. Try to decide what work you need to do to bring it back to cultivation. Adapt your gardening to your abilities and the amount of time you can spend.

Unfortunately new plot holders may inherit rubbish such as broken glass, rotten timber and assorted metal, left by the previous tenant. This should be collected and disposed of at a legally registered site. Any material which can be recycled like timber may be useful for making raised beds or compost bins. This practice is in the best allotment traditions and is economical and preferable to purchasing new.

Digging the soil is one of the most physically demanding activities in gardening, as it involves continual bending and straightening of the back while digging. Do a little at a time to prevent back problems and vary your tasks to prevent boredom. If your plot has been neglected for several years, digging the soil over thoroughly before planting is important.

- If the plot is overgrown with long grass or weeds such as brambles you may need to use a strimmer or hedge clippers to cut them down.
- Remember to inform the Allotments Group committee members if you are unable to clear your plot immediately for any reason, or you could risk losing your plot!
- On weedy plots, plant large leafed crops such as potatoes, courgettes or runner beans, this will smother weeds.
- You will still need to remove weeds regularly to prevent your crops being overrun by weeds during the first months of cultivation.
- Some people prefer to use methods of cultivation that do not involve digging. Mulches of compost or thick polythene are perfectly acceptable, as are green manures on fallow ground.
- The best time for digging is autumn or early winter if you want to be ready for seed sowing in spring. If you dig in compost, manure or the remnants of last year's crop, worms and micro-organisms will break it down over the winter.
- If you are not an experienced gardener, feel free to ask fellow Allotment Group members for advice

Getting to Grips with Weeds

If you do not plan to work straight away on a bit of land then cover it over with some weed suppression fabric or black polythene available from garden centres or alternatively thick cardboard or newspaper. This will work as a weed retardant and make your life much easier when you do start to work on your land. Some people cut slits in the plastic and grow their seedlings through these holes. Even the most persistent of weeds will die after having sunlight excluded from them for three years.

Wood can also be used as a border on the sides of your plot. This can stop invasive weeds from growing in. Just the size of a normal plank of wood will do. If you are growing organically then you will need to do most of the weeding by hand or with a hoe. Try and catch the annual weeds whilst they are young before they can really take root.

Mulching is also an idea; put a 5cm (2 inch) layer of organic mulch between the seedlings. The mulch smothers the light from the weeds and keeps them from growing.

Perennial weeds such as couch grass, dandelions and docks with their deep and persistent roots must be removed before crops are sown or planted.

Never rotavate the soil at this stage, because every piece of root is chopped into several by the rotavator's blades, so where there was one weed many more will be propagated.

If the ground is needed for cropping in the near future there is no alternative to the laborious and painstaking task of root removal by thorough digging.

Tools & Equipment

If you have no tools, start by buying only the essentials first spade, fork, hoe, rake, and trowel.

- If you cannot afford brand new tools, it may be possible to buy old or reconditioned tools from auctions, market stalls, car boot sales or other gardeners.
- Both fork and spade are in constant use and should be as solid and strong as possible.
- The fork is used for raking and spreading compost, for harvesting vegetables, for digging and the removal of roots of perennial weeds.
- The spade is used for cutting edges, winter digging, and making trenches and for emptying the compost heap.
- The rake is used for breaking down and levelling roughly dug earth to make a fine seedbed. It is also useful for gathering together debris such as weeds and hedge clippings.
- A wheelbarrow is essential for moving heavy or bulky material.
- Using water butts that are set-up to collect rainwater from sheds or other structures is a good way of saving on water consumption.
- A watering can is important, as the use of hosepipes and sprinklers for watering crops on allotments is forbidden.

Tip: Remember that you should not leave any valuable tools on your Allotment between visits even if secured in a shed.

What to Grow & When

The simple rule here is grow whatever you like to eat! Potatoes are always a good idea as they are good for the soil. As you have to keep moving the soil up around them weeds are kept at bay also because you have to fork them out of the ground it is turned over again. Some crops to consider in your first season

- Courgettes (but don't plant more than a couple of plants otherwise you will end up with a glut) as they are heavy croppers
- Beet spinach (also known as perpetual spinach) this can be picked for months and it will keep growing new leaves.
- Broad beans, carrots and beetroot
- Onions. leeks

Most vegetables will benefit from growing them in pots first using a good potting mix

When planting seedlings (in pots) place cling film (or any see through plastic, e.g. pre-prepared salad bags) over the top of the pot to act as a cheap propagator, remove this when the plant touches the cling film

Health & Safety

Cultivating an allotment can be hazardous. Please bear the following hints in mind when you are on site:

- Hard physical work or lifting heavy or awkward loads requires care, practice and an understanding of your own capabilities and physical limitations, particularly if you are not used to it!
- Digging is one of the most physically demanding tasks in gardening. It needs to be approached with care. For your back's sake, do not rush your digging.
- Machinery - if you are using power mowers or strimmers, remember that you are responsible, as an allotment tenant, for the safety of other tenants and visitors.
- Bonfires are allowed on our allotment sites providing they do not cause a nuisance. A bonfire must be fully extinguished before leaving the plot.
- Broken glass and other materials may be hazardous if left on your allotment.
- Tetanus is an illness caused by bacteria present in soil and manure, which can enter the body through the tiniest abrasion, scratch, thorn, puncture or cut. Make sure that you have a vaccination that can protect you against the disease. Check with your GP that your tetanus vaccination is up to date.
- Garden tools can be a hazard if they are not stored properly or are left lying around the plot when not in use.
- Any evidence of rats, wasp's nests or any other pest on your allotment should be reported to Chesham Town Council who will arrange appropriate control.
- Having a first aid kit available is always a wise addition to the tools. A small selection of adhesive plasters, antiseptic ointment, a pair of tweezers for removing thorns and splinters and a gauze or lint pad to use as a compress to stop the bleeding if you are badly cut.

Chemicals must be kept securely locked in their own cupboard in your shed, in clearly marked containers. Do not keep them in lemonade bottles or other food containers or leave them lying around your plot. If you must use slug pellets and other chemicals, please keep them to your own plot and do not put them on your neighbour's plot. They may garden organically and will not thank you for it! Be aware of Chesham's "Chemicals in Open Spaces Policy". The relevant section applying to Allotment Holders

"All allotment holders are encouraged to co-operate in the use of chemical pesticides by ensuring that:

- *the chemical is applied in suitable weather condition*
- *the chemical does not encroach onto neighbouring allotments through either 'spray drift' or seepage*
- *the chemical does not harm persons, animals or birds, nor encroaches upon neighbouring property, public footpaths or the public highway*
- *all chemical containers must be stored safely and securely while on the Town Council's property"*

Also remember to protect seedlings from slugs when planting out. This can be done with slug pellets or some form of barrier.

Digging

The usual method of clearing is to do it in sections, covering them over as soon as they've been dug until the time is right to plant up a crop. There are two main digging types: single digging and double digging.

Single digging

Single refers to the depth of the dig, measured in spits, which is the depth of a standard spade or fork. In this, you dig out a trench, throwing the soil forward onto the soil in front and then hitting it with the spade or fork to break it up a bit. This also reveals the roots or any perennial weeds and allows you to remove them as you go. Have a bucket or wheelbarrow next to you while digging to put the weeds in. The inclusion of manure can help to incorporate organic matter and improve yields

Double digging

Here you dig the single spit trench as before, putting the soil either on the ground or in a wheelbarrow, then dig another single trench in front of it, putting the soil on top of the previous or in the barrow. Then dig down another spit, incorporating manure or compost into the soil. This deeper soil is known as subsoil and should not be brought to the surface. When you have finished with the trench, dig your next single trench, throwing the topsoil on top of the manured subsoil, then do the next deep trench etc. When you have worked your way across the whole plot, you barrow the topsoil from the original trench across to the final one and use it to fill in the hole. This is very hard work, but sets up the soil fertility extremely well for several years. It also means you get deep enough down to get out all the really pernicious weed roots.

Hand digging

This is possibly the easiest way of getting shot of weeds when you're first cultivating an allotment. If you have been lucky enough to inherit a plot which has bare soil visible and scatterings of weeds, then working your way across with a fork or hand trowel will allow you to get rid of a lot of the smaller weeds into the compost heap. Then when you dig over the plot, you can just dig rather than having to keep bending over to pick out the weeds. It also allows you to be more confident about using or not using rotavator's, since by forking it over to 3-4" you'll have a good idea if there are perennial weeds lurking.

Crop Rotation

Once you have cleared a plot what do you do? You need to get out a pen and paper and plan what you are going to grow and where. Chances are that you have only room for a few things if you're progressively clearing a plot, in which case choose your favourite vegetable and grow it! Record what you planted and when, and next year, rotate the place you grow that type of crop to somewhere else. Rotation means growing different vegetables in a given patch of soil each year, for a number of reasons.

- Different crops take different nutrients out of the soil, so rotating makes sure a given area isn't depleted of too much of any nutrient too fast for it to be replenished.
- Different crops also use different cultivation techniques, e.g. potatoes need regular earthing up, which means the soil is continually disturbed and weeds are not allowed to take hold. Also the potatoes break up the ground with their roots. This means that soil is 'cleaned' by the weed removal. Other crops don't like disturbance once they're in, so weeding is tricky. Rotating means that weeds get clobbered every few years by the potato rotation even if you're not as careful about hand-weeding the carrots.
- Different crops need different levels of plant food and humus. Some crops prefer more fertilisers than others and some hate it. Rotating means you can manure just the sections that are due to grow heavy feeders.

- Rotation helps to control pests and diseases. This is probably the most important reason. The longer the rotation the less chance there is of a particular pest or disease building up to significant levels. A lot of insect pests overwinter underneath the place where the plants they fed on were: if different crop is there the next year, a large number will die before finding food.

Three-year (simplest method) for small plots

1. brassicas (e.g. cabbages sprouts broccoli)- add general fertiliser and lime
2. potatoes, alliums - add manure in the previous autumn
3. root crops (e.g. carrots parsnips beetroot) and legumes (beans) add nothing

Four-year (HDRA recommended method)

1. potatoes and tomatoes - add organic matter, high nitrogen (manure)
2. roots add nothing
3. brassicas add general fertiliser and lime
4. legumes (e.g. peas beans) - add organic matter, low in nitrogen (compost) In this rotation, the alliums go with one of the other groups, but chosen so they are grown in a different place and with a different group each year.

Five-year (RHS recommended method)

1. potatoes and tomatoes - add organic matter, high nitrogen (manure)
2. roots add nothing
3. brassica add general fertiliser and lime
4. legumes add organic matter, low in nitrogen (compost)
5. alliums (e.g. onions leeks etc)- add organic matter, low in nitrogen (compost)

Either way, potatoes are always followed by roots followed by brassicas. Sweetcorn and marrows/squash seem to go wherever there's space, though rotating the Sweetcorn is a good idea as it's subject to a fungus called smut which can persist for >5 years in the soil.

Covering the soil when not planted with a crop

This stops weeds growing (good if you've just cleared it and don't want to start again in a month) and also prevents nutrients washing away. Covering the beds can be with exactly the same things you covered plots with while getting round to the digging, with the addition of green manures and mulches if and only if the rotation permits it. If your next crop is potatoes, corn or marrows then growing green manure is a good idea, as it will incorporate high nitrogen matter into the soil. Field beans are especially good here as they fix nitrogen for the next crop. Some green manures are quite low in nitrogen so can be grown prior to brassicas, for instance. Whatever you decide, leaving a bed uncovered is a bad idea, as all it will do is increase the amount of weed clearing you have to do the following season or before the next crop is sown or planted out.

Beds vs. Rows, and no-dig allotments

The traditional way of growing crops in an allotment is straight across the width of the plot, walking a path in between rows for access. Each autumn you dig over the entire allotment, digging up the compacted paths and start again the following year, adding manure as appropriate to your rotation as you go. Newer ways involve smaller beds, perhaps edged with wood, but no more than 4-5' in width (1.2- 1.5m) so you can kneel at the side and reach over to the middle without having to tread on the soil. This has two effects: your soil doesn't get compacted, so it makes it easier to dig, and if you don't want to dig again (a typical sentiment after clearing a plot!) then you don't have to**.** If you need to add manure for the rotation, spread it on top then cover with plastic or cardboard, and the worms will do all the hard work for you over winter. You don't have to edge the beds and raise them, but it does stop soil slipping onto the paths, which you can make permanent by covering with bark, woodchip, weed-suppressing fabric etc.

Weed Control Methods

This includes a description of the common weed suppression methods.

Suppression mulches/fabrics

Covering or mulching the soil surface prevents light getting to the soil and can reduce weed problems by preventing weed seed germination or by suppressing the growth of emerging seedlings. Mulches are generally ineffective against established perennial weeds unless they are kept in place over several growing seasons. Some typical mulches are described below.

- Black plastic is often used but you can't fertilize during the growing season, and is typically only useful for one season for various reasons. It provides total weed suppression; helps warm the soil, conserves moisture initially.
- Carpet or woven weed mat is still difficult but not impossible to fertilize during the growing season. It is good for total weed suppression, permeable to water, warms the soil, conserves water, will last around five years, maybe more if it has a mulch on top to protect it from the sun.
- Particle mulches: may be organic or inorganic. Loose materials like straw, bark and composted municipal green waste provide effective weed control but a 3 cm the depth of layer is required to prevent the emergence of annual weeds and weed control usually improves as the thickness of the organic mulch increases.

Hoeing

A garden tool with a thin flat blade usually on a long handle that is used especially for weeding and/or loosening and breaking up soil around plants. Use a hoe when weeds are small and haven't set seeds. Use the hoe to sever the tops of weeds from their roots just below the soil surface. Carefully scrape the soil with the hoe, its blade will barely enter the soil and will cut the stems of the weeds. Young severed weeds may be left on the ground to wilt and break down where they are on hot sunny days.

Using pesticides

Glyphosate is a herbicide often called Round-up or Tumbleweed. It acts by penetrating the leaves of actively growing plants, and then working its way down to the roots (systemic action). This kills the whole plant and not just the top growth like most herbicides. Because it takes time, the effects are often not seen for 2-3 weeks after spraying. But beware: it is very powerful and you must NOT use it if there is even a slight breeze. If you do, you may well accidentally destroy neighbouring crops, and your fellow plot holders will not be pleased! It drifts a lot further than you think! It does become inactivated once it hits the soil, so ground can be planted up as soon as the weeds die back.

Rotovating

Rotavator's are often seen by new allotment holders as a marvellous way of clearing the plot. They do have their advantages but not as many as you might think. To use one, you have to pull and push it backwards and forwards, which is very painful on the shoulders. It will not dig as deep as traditional spade digging, and will chop up the roots of any plant it meets. For couch grass and anything that can regenerate from tiny root sections like thistles, bindweed, dandelions, docks and ground elder, it can simply make the problem worse if you do not remove all of the parts of roots. So beware!

Strimming

You might be able to borrow a decent strimmer from another plot holder, though if you don't know anyone, the local hire shop will probably be delighted to rent you one for a day. When using a strimmer make sure you wear the appropriate safety gears that typically would include a face mask or goggles, and ear defenders. You should always make sure that you wear stout shoes, gloves and full-length clothing. Flying debris can include slugs, snails, animal excrement, nails, stones or pieces

of glass, so you want to make sure you are well protected. Fire up the strimmer and then gradually work your way across the patch, cutting it down to a height of a few inches.

Typical Weeds

Below are described common weeds that you will come across on your allotment.

Perennial Weeds

Perennials live on, year after year. They may appear to die off in over winter, but the root lives on and new foliage grows from this root the following year. They have deep complex root systems and are able to draw on reserves of food in order to grow back to the surface, but if it can't get light, it cannot replenish them. There are a finite number of times it can therefore regrow if it can't get light.

The organic treatment is to dig out, cover, wait a week or two, uncover, and dig out the new sprouts as far down as you can get the fork, repeat this and eventually it dies. But many perennial weeds are persistent and so you can expect to be digging it out for months.

Chemical treatments require the use of a systemic weed killer such as glyphosate. On the more persistent perennial weeds you will require several treatments to weaken and kill the roots.

Grass

The best way to deal with grass organically is to start by strimming it. Pile the grass up at one side: this pile will become your compost heap, so site it somewhere convenient

Thistles

Creeping thistle is tricky to get rid of organically: the HDRA describes it as a pernicious perennial, meaning it's a pain to get rid of and doesn't die each winter. They recommend digging it out as deeply as possible, mulching the ground to weaken any new growth. Creeping thistles have very deep complex root systems.

Brambles

These are also a pest to remove, but it's not impossible to do it organically. The roots are relatively shallow, so can be dug out with a fork. Strimming the tops off first is however a great help. In this circumstance, you can't use a line strimmer. You need a specialist brushcutter which has a blade rather than plastic line or alternatively many people have effectively cleared plots with secateurs, sickles and loppers. Generally people will use a strimmer as it will make short work of a patch of brambles. You will also need very thick gloves, preferably leather, to pick up the pieces! Then you can go in with a fork (spades tend to sever roots, which can then regrow) and start levering out the roots.

Nettles

These come under the same heading as brambles, i.e. strim and start digging. They generally have deep roots, but these are more fibrous than other perennial weeds. They die back each winter and then regrow in spring, so can be easier to deal with during dormancy. Again you need to make sure you dig out all the root pieces, both the fibrous ones and the longer creeping sections which is how they spread.

Ground elder

This is another really nasty weed. It doesn't grow very high, but does smother everything in sight. It forms a dense mat of roots a few inches below the surface which takes a lot of digging out as it's literally woven together. In this case, putting light-excluding mulch on first is probably the best approach, which after a few months will have weakened the plants enough to make them easier to dig out. You'll need patience, a good strong fork and probably a heavy duty knife with replaceable blades to cut sections free.

Bindweed

This is pretty much endemic in most allotments, because it's another weed with really deep bright white roots which snap easily when you try and dig them out, and it can regenerate from a tiny fragment. Field bindweed (the tiny pink one) is the hardest to get out, and with deep roots the only method you've really got is to remove and burn every white root you find while digging. The hedge bindweed (huge white flowers) will climb up everything and is nigh-impossible when it's tangled up in the roots of a fruit bush or similar. Keep digging, and eventually you'll weaken it enough so it doesn't regrow. It loves manure heaps too.

Annual weeds

Speedwell, fat hen, groundsel, chickweed and scarlet pimpernel are some of the more prevalent annual weeds. They are easy to remove when small, but do run to seed extremely fast and so it's well advised to keep them down by hoeing or hand- weeding once your plot is up and running. Speedwell is particularly hard to eradicate since its seeds can mature after the plant's been pulled up: unless you have a very warm compost heap to kill seeds, you may well reintroduce it a few months later.

Pests & Disease

One thing you probably won't find out quickly is what is lurking in your plot. Lots of pests and diseases can persist in the soil for years after their introduction, and will take off at the first sign of their favoured crop. The reference books listed below contain a lists and remedies of the common pests and diseases. Bear in mind just walking over an infected plot can transfer the pathogens to your own, so be careful and considerate.

Brassicas (cabbages, broccoli etc)

Club Root: This is the main problem for brassicas, and causes incredibly twisted and deformed thick roots on the plants, so they can't feed properly. This stunts them. Once in the soil, it's there for good. It prefers acidic and neutral conditions - heavy liming will deter it from having its worst effect. You deal with it by growing your brassicas in compost to as big as you can before planting out, so they develop a decent root system. Resistant varieties such as 'kilaxy' are also available

Cabbage Root Fly: Another serious pest of the brassica family but it can be prevented from causing damage by barrier methods.

Onion white rot

A fungal disease: It persists at least 8 years in infected soil from the last date an allium (onion crop) was grown there. So you really do need to quarantine an area if you've white rot. Symptoms are fluffy white mould on the roots and discoloured, slimy outer layers of the onion concerned. Garlic is the usual way in which it gets onto a plot: never use supermarket garlic bulbs as they are not certified to be clear of rot! (Also commercial crops are usually grown in hotter countries so are not bred to be good croppers in the UK anyway.) Leeks tend to be fairly resistant to the rot, but overwintering onions and summer onions tend to be worse.

Best bet if you've got it: create a raised bed (at least 8" deep) with wood, line it with black polythene and punch drainage holes in it, add at least an inch layer of grit for drainage and fill with topsoil. Grow your alliums in that, and do NOT put your garden tools (or unwashed hands/gloves or feet!) into it from the main plot or you'll be back to square one...

Persistent potato diseases

Potatoes seem to win hands-down over other vegetables for problems. These are just the problems which persist in the soil from year to year and do not include diseases which appear on a random annual basis, such as blight. If blight does appear cut the foliage down to prevent the disease spreading to the tubers.

Virus diseases: These tend to build up. The 1st year they are not usually a problem, not enough to affect yield. They become more of a problem if you save your own seed potatoes. The second year's disease is usually much worse. Examples: potato mosaic virus (blotchy leaves), potato leaf roll virus (leaves roll inwards along the main vein). ALWAYS use certified healthy seed potatoes, and if you do intend to save any, protect from aphids by growing in fleece.

Wireworms: These are click beetle larvae (copper coloured, three pairs of legs at the head end) and they will tunnel in and through tubers with ease. They tend to be worse where you've just dug over grassland to grow crops for the first time, and the best solution is to avoid growing potatoes in such areas for 3-4 years after first cultivation since the lifecycle is eggs laid in grassland and weedy soil, early midsummer. Larval stage is long, up to 5 years.

Common Pests

Butterflies & Caterpillars: Eggs typically under the leaf and caterpillars hatch out and then eat the crop. Worst affected are cabbages and cauliflowers but all leaf brassicas can suffer. They are fairly easy to control without resorting to chemicals or biological controls. Regularly check under the leaves for clusters of eggs. These will be seen as small yellow or white spheres. Just wash them off or crush them with your finger.

Flea Beetle: This pest is worst on radishes but can affect turnips and swedes as well. It is a small beetle that jumps when disturbed, hence the name 'flea beetle' The beetle eats holes in the leaves which weaken the plant as with less leaf area to produce food for the plant it cannot grow as well.

Cabbage Whitefly: They suck the sap of the plant through the leaves. Great clouds of them may fly up when the leaves are disturbed. They don't cause too much harm and are easily handled by either washing with a jet of water, insecticidal soap or derris.

Mealy Aphids: These are grey-green aphids that form colonies on the leaves and stems in the summer. They can cause a serious check to growth and need to be addressed. Ladybirds will eat the mealy aphids or you can squash them by hand or treat with derris or insecticidal soap. They over-winter on brassica stumps so do not leave these in the ground after harvest.

Pigeons & Birds: Pigeons are serious pest and physical barriers are the only real answer. The common method is to net the crop to stop them from getting to the leaves. The net must be well supported and secure to prevent the pigeon access to the leaves. Bird scarers such as CDs appear to be of limited value.

Slugs & Snails: Attack many crops. The main methods of control are barrier methods (surround by sand/ash), traps (based on milk or beer), pellets and nematodes (a biological treatment).

Fertilisers

These are used to feed the soil. Historically these comprise manure, “organic fertilisers” (manure can be considered an organic fertiliser but is often considered as a separate topic) and inorganic fertilisers. The definitions used here are:

Manure is organic matter used as an organic fertilizer in the allotment to increase and replenish the fertility of the soil by adding organic matter and nutrients, such as nitrogen, that are trapped by bacteria in the soil. Manures help build and maintain the structure of the soil

Inorganic fertiliser a chemical product, of either mineral or synthetic origin, that provides nutrients to stimulate plant growth. They are not usually approved for use in organic systems but they do not have any potential risks like pesticides to humans and wildlife.

Organic fertilisers are naturally-occurring fertilizers (e.g. seaweed or green manure), or naturally occurring mineral deposits (e.g. saltpetre or phosphate rock).

Manures

There are three main types of manures used on the allotment

Animal manures

Most animal manure is faeces. Animal manure includes farmyard manure or farm slurry. It also usually contains plant material (often straw), which has been used as bedding for animals and has absorbed the faeces and urine. Manure from different animals may have different qualities and require different application rates, such as manure from farm animals such as horses, cattle, pigs or sheep, chicken and turkey manures, rabbit manure, and guano from seabirds and bats. For instance, sheep manure is high in nitrogen and potash, and pig manure is relatively low in both. Horse manure also contains lots of weed seeds, as horses do not digest seeds the way that cattle do. Chicken manure, even when well rotted, is very concentrated and should be used sparingly. Animal manures may also include other animal products, such as wool shoddy (and other hair), feathers, blood and bone.

Never place fresh manure directly around plants as it can cause scorching of stems and leaves due to very high nitrogen levels. It is better to compost fresh manure for a few months to allow the nitrogen to dissipate and then use it, or obtain well-rotted manure for immediate use.

Well-rotted manure should have a sweet earthiness smell and should be dark brown, even black in colour. Generally, manure should be piled for at least 6 months before use, however if it is mixed with wood shavings, leave it for a year as these take longer to break down.

Well-rotted manure should ideally be spread and then forked into open beds in the spring, at least three weeks or more before planting. For applications cow, horse and pig manure should be spread over the soil at an average depth of at least 3cm and then forked in; poultry and sheep manure - at least 2cm deep; rabbit, goat and exotics - at least 4cm deep.

Compost

Compost is the decomposed remnants of organic materials (see section below).

Green manures

Green manures are crops grown for the express purpose of ploughing them in, thus increasing fertility through the incorporation of nutrients and organic matter into the soil. Leguminous plants such as clover are often used for this, as they fix nitrogen using Rhizoidal bacteria in specialized nodes in the root structure.

Fertilisers

Inorganic fertilisers

Artificial fertilisers are normally supplied as mixture of different chemicals in the right proportions to provide a balanced fertiliser. The components are also available in simple or straight forms. The most famous balanced fertiliser is Growmore. It is the most popular generic compound fertiliser. Some artificial fertilisers are supplied in prilled or granular forms, making them easier to handle and apply. Slow release fertilisers are the simple chemical coated in clay or polymers designed to dissolve and release the content over a period of time.

Organic fertilisers

They generally contain the same basic elements as inorganic fertilisers but are sourced from natural materials. Mainly they are by-products of the meat processing industry.

- Fish, blood and bone is an organic version of Growmore.
- Dried Blood or Blood Meal Dried blood is easily soluble and as fast acting as inorganic fertilisers
- Hoof and Horn is 12% nitrogen but it is slow acting. The benefit of this is that you can use it as a base dressing for crops like brassicas and it will gradually release its nitrogen payload over the season.

- Bonemeal provides a small amount of nitrogen. It is an excellent source of slow release phosphorus, as well as containing calcium.
- Chicken Manure Pellets widely used as a top dressing.
- Seaweed meal and extracts are more of a tonic and conditioner than a fertilizer used to provide minerals and trace elements.
- Calcified seaweed is mineralised seaweed taken from the sea and is used directly on the soil to increase microbial activity.

Composting

Composting is a natural process carried out by millions of tiny creatures, most of which are too small to be seen with the naked eye. These creatures include microscopic bugs, fungi, insects and worms which breakdown your compostable matter into a crumbly soil like material.

How to get started

Firstly obtain a bin. This can either be a new compost bin or a home made one. Place your bin somewhere level and well drained, on soil or grass. This is so that excess liquid can drain out and worms can get in to start breaking down your waste.

Ideally, you should place it in a partially sunny spot, but don't worry if you have to put it in the shade: your waste will still break down, but at a slower rate.

If you cannot place your bin on soil and you have to put it on a concrete or paved surface, add some healthy soil, compost or manure to introduce some microorganisms and get the composting process started. Make sure you can access your bin easily, and leave enough room to mix the waste and get the finished compost out. Ensure your compost bin contains a balanced mix of materials and the right amount of moisture and air.

Materials

Browns are dry, fibrous materials which are high in carbon. These include:

- Cardboard tubes
- Egg boxes
- Straw and hay
- Woody prunings (shredded / chopped)
- Old perennial plants

Greens are soft, sappy materials with a high nitrogen and water content. They include:

- Fruit and vegetable peelings
- Grass clippings
- Green prunings
- Annual plants
- Weeds
- Flowers
- Young hedge clippings
- Fruit / vegetable crop remains

You will get the best results by using a mixture of half browns and half greens. Also remember that worms don't have teeth, so to get good compost as quickly as possible, it is best to chop your material up into little pieces. The general rule is that anything that was once alive can be composted.

However there are some things that are best not put in the bin, either because they will not rot down properly, or because they will create smells and attract pests:

- meat or fish
- dairy products
- cooked food
- cat and dog excrement
- disposable nappies
- biscuits and bread
- diseased plants
- plastic, glass and metal
- coal ash

Conditions

It is important to get the moisture levels of your compost right. Too wet and the compost becomes slimy; too dry and the composting process will slow down and might even stop! To test the moisture level, squeeze a handful of the composted material. Ideally it should feel about as damp as a wrung out sponge.

The tiny organisms that make your compost need air just like us. Introduce air into your bin either by using a garden fork to mix the material, or by adding more scrunched up paper and card, which will help to form air pockets.

There are a number of products on the market that claim to speed up composting. Collectively called “compost accelerators” they promote in different ways the growth of bacteria and fungi that are required for composting

Some commonly asked questions

Can I put windfall fruit into my compost bin?

Yes you can. If the fruit can be squashed before adding, it will decompose a lot faster. You should also be aware of fruit being a 'green' so be sure to add some 'brown' material to keep the correct balance.

Can I compost rhubarb leaves?

Yes, rhubarb leaves are poisonous when eaten. However when they are composted they decompose and are completely harmless.

Can I compost ashes?

It depends on the type of ash. Ashes from coal or coke contain sulphur dioxides so should not be added. Charcoal briquette ash can contain chemicals to assist burning so should also be avoided. Wood ashes or those from pure charcoal are excellent sources of potassium; however they should only be added sparingly, as they are highly alkali and can interfere with the composting process.

Can I compost all types of paper and card?

In general people have a predominance of 'greens' in the garden, e.g. grass cuttings and plant material. But composting 'greens' on their own will make a slimy, smelly mush. Paper and card are classed as 'browns', and play an important role in creating air spaces within your compost heap. We recommend that you don't compost newspapers, but recycle them. Don't tear into little flat pieces, instead screw up the paper and card. This traps air pockets and provides structure within your heap. Tests show that inks and glues also break down harmlessly. Avoid cardboard containers, used to hold liquid, (tetra-pak) as these are often lined with plastic and or foil.

Will my compost heap heat up enough to kill off weeds and plant diseases?

Some heat can be generated in your compost heap. The more waste that you put into your compost bin at any one time, the greater the amount of heat generated. High temperatures can be achieved in large compost heaps especially where grass cuttings are incorporated. If you put your hand in a pile of grass it can get quite hot only a few hours after being cut. However, you are unlikely to generate high enough temperatures to kill off weeds.

You do not need to generate heat in order to make compost. However, you do need to be a bit careful about which weeds you put in the bin. The last thing you want to do when you spread your compost around your garden is to also spread weed seeds around! Instead of putting weeds into your compost bin, put them in a black sack in the sun for a couple of months until they are dead and turn into slime. Then add them to your compost heap. Annual weeds can go straight into your compost. All weeds that have turned to seed and perennial weeds should be avoided, particularly those with taproots or weeds that spread via rhizomes.

When is my compost ready to use?

The composting process is complete when the compost is dark brown and has an earthy smell. At this stage it is best left for a month or two to 'mature' before use. Don't worry if it is not fine and crumbly like 'shop bought' compost. (This is sieved before it is marketed to produce a fine lump free product.) Your compost may be lumpy, sticky or full of eggshells and partially decomposed twigs. It will still be quite usable, the plants will not complain.

One good method to determine if compost is 'ready' is to break a twig in half. If the inside is dark brown with no sign of 'green' the twig has composted sufficiently to be used along with the other compost as a soil improver or mulch. The twigs that still have 'green' inside can 'go round again'

How long does it take to make compost in my bin?

This is dependent on a number of things. The general rule is about a year. The more you put in your bin the more rapidly the material will compost. Also the warmer the weather the faster it will compost. So in a warm climate it can take as little as 6 weeks and under cooler conditions it can take up to 12 months to produce compost. If you can place your bin in a sunny spot it will further help to speed it up, though this is not vital. You will notice that the process slows right down during the winter months, however it is important to carry on using your home compost bin during this time. A bin that contains a good balance of browns and greens chopped into smaller pieces with good aeration and moisture will decompose a lot faster than when one or all of these factors have been ignored

Why isn't my compost rotting down?

There could be a few reasons for this; you will need to look in your bin to work out what the remedy is. The composting process slows down in the winter. This is because the microorganisms are too cold to work quickly. To help speed the process up you can add an 'activator'. Animal pet bedding or a couple of shovels of manure are excellent compost activators. Urine can be used too, but dilute 1:4 or it will be too salty for the worms.

If it looks too dry, either water it or leave the lid off and get some rain in it. Be sure to add more greens in the future. Your compost should have the consistency of a damp sponge.

If it looks too wet add some scrunched up cardboard and more browns, this will help to absorb the moisture.

Why does my compost bin smell?

Compost should have a sweet earthy smell. For the composting process to work properly materials, moisture and air is needed. A compost bin that does not have enough oxygen will turn anaerobic. That is to say, that in the absence of air, the composting micro-organisms stop working to be replaced by another type, which work without oxygen. The by-product of their activity is a smell similar to rotten eggs. The solution is to re-introduce air into the bin to allow the 'good' microorganisms to continue their work, causing the bad smells to disappear. Add scrunched up cardboard egg boxes and toilet roll tubes.

A strong smell of ammonia usually denotes that there is too much 'green' material in the compost bin. Adding more 'brown' material will restore the balance.

Bees seem to be nesting in my compost bin.

It is most likely that it is Bumblebees that have taken up residence in your compost. In fact you are very lucky because Bumblebees are in fact endangered. It is illegal to kill them.

If possible I would advise that you carry on filling your compost bin as the nest will be empty by October/November and may then be removed without fear of being stung. They never swarm like honeybees and rarely reach more than seventy bees in a colony. Once you have removed the nest leave the remains in a sheltered place in the garden. Do not leave the nest in the bin as you may end up with a dozen or so nests the next year.

My compost bin seems to attract slugs

Your compost bin is a great feeding ground for slugs and snails as they help to break down your compost. Many people take advantage of this by putting them in the compost bin. This way you know exactly where they are and because you are regularly feeding them, they have no reason to leave your bin and munch your lettuces. They will keep moving up the bin to get to the fresh material, eventually dying of old age in your heap, fat and happy! It is unlikely that any slug eggs laid will survive whilst in the bin as they will either be predated on or decompose as they become compressed within the heap. Ensure that all of your compost is fully decomposed before using it on your garden.

Useful References

Websites

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5. Allotment Advice & History http://www.allotment.org.uk/

Books

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