GETTING STARTED

This article is aimed at those who are new to growing their own fruit and vegetables. It describes what I would do if I had to take over a new plot and convert it into a productive fruit and vegetable garden. acquired my present house, garden and allotment in 1973. What follows is based upon 36 years of practical experience.

Firstly, why grow your own in the first place? Well, the main benefits are health benefits. There is the obvious one of taking physical exercise, which becomes compulsory since if you do not keep on top of the weeds the task of dealing with them becomes much greater. Secondly, you are more likely to eat the recommended five portions of fruit and vegetables a day if they are "free". Thirdly, you can eat really fresh food which will contain more vitamins than older food from the supermarket. This means they taste better because of the increased vitamins – and also because if you grow your own you have a better chance that the vegetables and fruit contain enough of the essential trace elements (see below). I am convinced that the presence of adequate amounts of trace elements results in fruit and vegetables tasting better. Fourthly, you can avoid pesticides, herbicides, fungicides, etc by being completely organic if you wish to. Even though the European Union (EU) have banned on health grounds half the chemicals that farmers use they still approve of some 475 chemicals. The chemicals account for about a third of farmer's input costs and are poured onto the crops in vast quantities. For example, potatoes are sprayed 13 times on average. Trying to avoid all that by buying "organic" fruit and vegetables from supermarkets does not mean that you will avoid all chemicals. The nine bodies which grant farmers "organic" status in the UK permit 7 pesticides, and a further 5 are permitted on food imported from the rest of the EU. No, the **ONLY** way to avoid man-made chemicals is to grow your own.

NUTRITION

The fifth health benefit from growing your own is not obvious, but is very important. Nutritionists say that there are 19 trace elements we need to eat every day for our health. These are: selenium, zinc, magnesium, copper, potassium, calcium, iron, manganese, chromium, molybdenum, phosphorus, boron, sodium, chlorine, silicon, nickel, cobalt, vanadium and fluorine. We can obtain adequate quantities of these from fruit and vegetables grown in soil which contains adequate quantities of them – and has sufficient soil micro-organisms to bring them to the roots of the fruit and vegetables. Unfortunately, supermarket fruit and vegetables are most unlikely to contain adequate amounts. For example, people in the UK eat only a quarter of the recommended daily amount of selenium. A deficiency of selenium can lead to heart attacks, strokes and diabetes. Why are supermarket fruit and vegetables deficient in trace elements? Since 1946 farmers have changed from mixed farming, where manure from farm animals was returned to the land (and thus trace elements taken up by crops was returned to the land) to specialised farming using just nitrogen, phosphorus and potash fertilisers to improve soil fertility and neglecting to put back the essential trace elements. Government tests showed a 40% reduction in trace elements in vegetables between 1940 and 1991 – and the reduction must have continued. You can avoid this impoverishment of the soil by applying copious quantities of farmyard (ie cow) manure to your soil year after year and so build up your trace elements progressively so that they reach an acceptable level (I increased mine by 157% to reach an acceptable level). Let me put the problem another way. If the average person in the UK is obtaining only a quarter of the selenium needed to ensure health, that person could eat 4 times as much food to obtain adequate selenium. However, there would then be the small problem of being horrendously obese. No, the only way to obtain adequate amounts of the 19 essential trace elements is to ensure that the food you eat contains adequate amounts – and that means growing your own. **It is the only way.** And by not digging the soil, in order to preserve the soil structure, you can ensure that the soil micro-organisms are there to bring the trace elements to the roots of your fruit and vegetables.

THE SOIL

The most important point to start off with is to examine the soil of your garden or potential allotment. I have a good foot of clay loam on top of clay. I think that is a very good combination. The clay loam is full of nutrients and the clay underneath helps to retain moisture during hot dry summers (yes, we can have them!). If the ground is stony you can, over several years, progressively remove the stones but such soil is best avoided, as are cases where a thin layer of topsoil covers chalk. In the latter case any rain will rapidly drain away into the chalk and you will have a huge watering task for ever. Ideally you should find out where there are allotments with good soil then move house to be within wheelbarrow range, say 200 to 300 yards. I say live within 200 to 300 yards because, if you want to eat really fresh fruit and vegetables you need to visit your allotment nearly every day, so to be within wheelbarrow range is very important. If the present movement to "grow your own" continues to gather strength then we may come to see houses near good allotments being priced at a premium similarly to houses in the catchment area of a good school being priced at a premium. But if you have a large garden with good soil you have a great asset. My allotment is 113 feet by 38 feet to give some idea of the space required. Another aspect is a source of farmyard manure. Check to see if there is a farm with cattle where the farmer is willing to deliver a trailor-load. I have a load of 3 ¾ tons every year. That is about 100 builder's wheelbarrow loads to give you some idea.

GARDENING TOOLS

Now to tools. The most important tool is a hoe. If you can go round your plot once a week or fortnight and hoe the sprouting weeds you will save yourself a lot of heavy work later in removing big weeds. If you can hoe them when they are small you can leave them there on the surface to shrivel in the sun. Then there is a good spade. Since the year 2000 I have not dug, but a spade is essential when digging up root vegetables such as carrots, parsnips and leeks. I have a large digging fork, but use it only for digging up potatoes and for emptying the compost heap. You need a good strong trowel to excavate small holes when planting out young vegetables and for removing larger weeds. Next, you need lots of horticultural fleece to put over areas you have just sown with seed to create a warmer environment and to protect some crops from birds or terrible insects such as the carrot root fly. Then there is fine-mesh netting (about ¼ inch mesh) to protect brassicas from pigeons and cabbage white butterflies. You will need secateurs for pruning fruit trees and bushes and a builder's wheelbarrow to carry everything backwards and forwards. A few builder's buckets are very useful for all sorts of tasks. You will need lots of seed trays and inserts with cells, eg 8 x 5 cells per tray, for germinating seeds in a propagator or whatever and growing them on until they reach planting-out stage (and after a week or two of hardening-off). Finally you need lots and lots of bricks to hold down the fleece and netting. I have about 300, so start looking in skips now for old bricks! There is no need for frames to hold up the fleece and netting. Just drape them over the plants and the plants will push up the fleece or netting as they grow.

TACKLING THE LAND

Now, how to convert an area of lawn or an overgrown allotment? The best way is to purchase a massive sheet of heavy-grade black polythene sheet from a garden centre or a builder's merchant. The sheet, or a few sheets, should be big enough to cover the area in question. Lay it out and anchor the edges with bricks or whatever, or dig a small trench all round, lay the edge of the sheet in the trench and back-fill the trench with soil. The aim should be to prevent the wind getting under the sheet. We always have strong winds every now and again and if the wind gets under the sheet it will depart to some other part of the planet. Then leave the sheet in place for at least 9 months. Anything growing under the sheet will be well and truly dead after that time and the dead remains can be raked off and seed sown or young plants planted out. There will be no need to dig. You will avoid a lot of hard work and, most important of all, the precious soil mycorrhizal fungi will be preserved to bring trace elements to your fruit and vegetables. **I cannot stress this aspect too much.** If you are taking over an unworked plot it has a treasure which would be destroyed if you dig. If your soil has already been dug then the soil mycorrhizal fungi will come back – but since they grow at only 6 inches per year it

will be a few years before they will be working for you again. At the start of the following season you can start building up the trace element content of your soil by applying a 3 inch layer of farmyard manure to a third of your plot (then planting out young plants such as brassicas, the marrow family, sweetcorn etc). In the following year the next 1/3 of your plot receives the manure and the first plot is used for larger seeds such as broad beans, onion sets, shallots and garlic. The third year sees the final 1/3 receive the manure and fine seed such as carrots and parsnips can be sown in the original 1/3. In the fourth year the first 1/3 receives the manure and the whole cycle starts again. If you cannot wait for 9 months with the black polythene sheet over the plot then peel it back progressively, removing weeds by hand whilst leaving the rest of the plot covered. The farmyard manure applications will import precious trace elements from the farmer's fields and after a few years your soil will contain adequate amounts for your health. The worms will mix the manure with the rest of the soil, especially in the top layer, creating a moisture-rich, humus-rich superb growing medium.

CONTAINER GROWING

Most of the above comments apply to growing vegetables in containers of various descriptions. One advantage of containers is that you can afford to incorporate lots of compost from garden centres and have a really rich, moisture-retentive growing medium right from the start. Crops can be grown really close to one another – but crops on the outside will have much more light. There is, however, the disadvantage of the need for frequent watering since water cannot be drawn up from the subsoil by capillary action as it can be in the garden or on the allotment. Also, it may be difficult to benefit from the actions of mycorrhizal fungi. However, if the container is in effect a raised bed, moisture can be drawn up from the subsoil and mycorrhizal fungi can migrate in from the subsoil. Indeed, it is astonishing what can be grown in a raised bed. Charles Dowding (see below), weighed the salad leaves he grew between 14 April and 20 December in two raised beds 8 feet by 4 feet. The weight of salad leaves was 156 pounds – which he then sold in 1/3 pound packs.

RECOMMENDED VARIETIES

I have tried many varieties of fruit and vegetables over the years and some have become firm favourites. Here is a list of those special ones which have worked for me consistently: second-early potatoes: "Charlotte"; maincrop potatoes: "Desirée"; asparagus: "Asperge d'Argenteuil" (from France); garlic: "Elephant Garlic"; chicory: "Zoom Hybride F1 (Endive)" (from France); summer beetroot: "Forono" (from France); Winter (underground) beetroot: "Crapaudine" (from France); maincrop carrots: "Carotte de Colmar 2 Race Flamir" (from France); winter salads: "Chinese Mustard Green-in-Snow", "Mizuna" and "Claytonia" (Winter Purslane); fennel: "Fenouil Doux de Florence"(from France); Swiss chard: "Silver Chard"; greenhouse tomatoes: "Alicante"; turnips: "Rouge Plat Hâtif" (from France); cooking apples: "Crimson Bramley"; dessert apples: "Braeburn"; pears: "Doyenne du Comice" and "Conference"; greenhouse grapes: "Black Hamburg". Seven of the varieties of seeds I cannot find in the UK but you should be able to find them when browsing through seed packets in garden centres in France.

SOURCES OF INFORMATION

Now for information on the growing of fruit and vegetables. There are many, many books on the subject. I have plenty. My favourite has been "The Complete Gardener" by W E Shewell-Cooper, first published by Collins in 1950. The book contains 734 pages and is a mine of information. However, time has moved on and new varieties of plants are now available. So what about modern books? The best by far that I have come across is "Organic Gardening, the Natural No-Dig Way" by Charles Dowding. It was published by Green Books Ltd in 2007. Charles has been a no-dig gardener for over 25 years and is a commercial grower in Somerset. He really knows what he is talking about. The book contains 224 pages and, like Shewell-Cooper's book, is a mine of information. Charles is a member of the Good Gardeners' Association (GGA) and has followed up that book with another on his speciality – "Salad Leaves for All Seasons", published by Green Books Ltd in 2008, with 200 pages.

For more information on no-dig gardening there are two articles by myself on this website. There are many other articles written by myself on the website on a variety of fruit and vegetable topics. Please also visit the GGA's website: www.goodgardeners.org.uk and consider joining. There is a group of local enthusiasts called South Chilterns Gardening which has visits to top gardens throughout the south of England and receives a quarterly newsletter. The group also has a website: www.southchilternsgardening.org.uk. Why not join?

Good Gardening!

MIKE MASON