21st-CENTURY SMALLHOLDER

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TRANSWORLD
BOOKS

About the Book

Achieving genuine self-sufficiency of the kind described in John Seymour’s classic guide is sadly beyond the vast reach of the urban majority today. Few have the space, and for those few there are comprehensive guidebooks. But where do the rest of us look for the answers to questions like how much effort does it really take to grow your own food? Is beekeeping difficult? Is solar power really worth the bother?

From a small terraced house in the middle of a big city, Paul Waddington has made it his business to find out, and while trying it himself, has created a practical and absorbing guidebook along the way. It includes easy-to-read lists, tables, personal anecdote, and stunning illustrations, and more importantly demystifies the subject with practical tips that get to the heart of the matter to show you how you can enjoy the fulfilling aspects of the smallholding life without the hassle and expense of ‘going all the way’. If you want to go back to the land without leaving home, this is the perfect guide.

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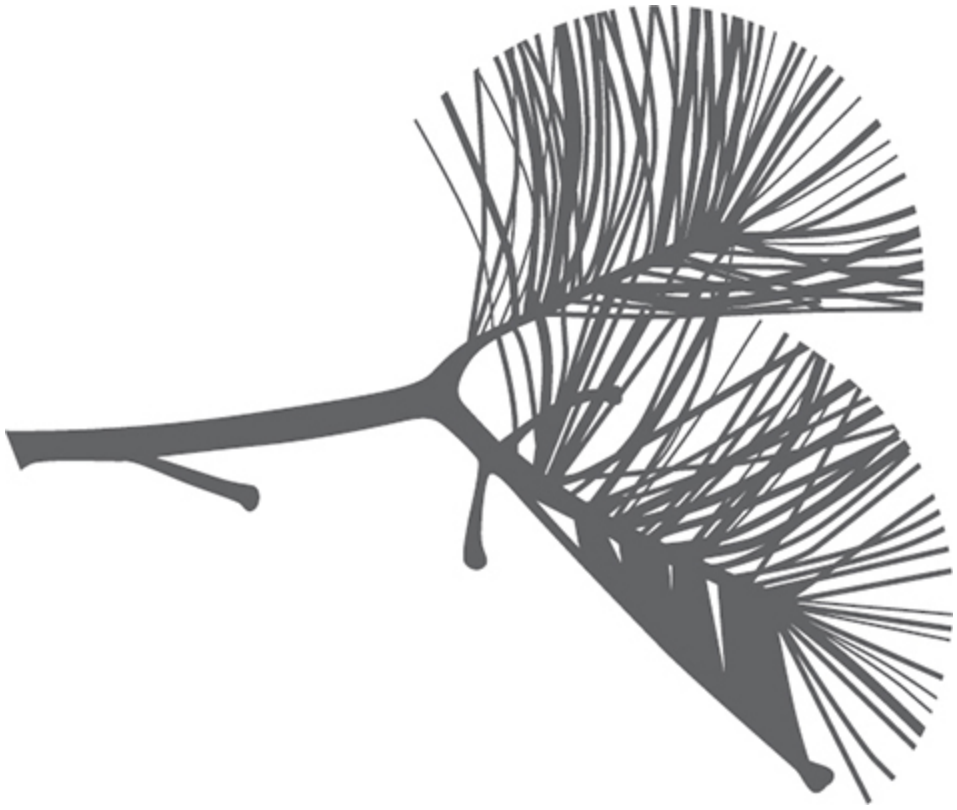
How to get back to the land without leaving home

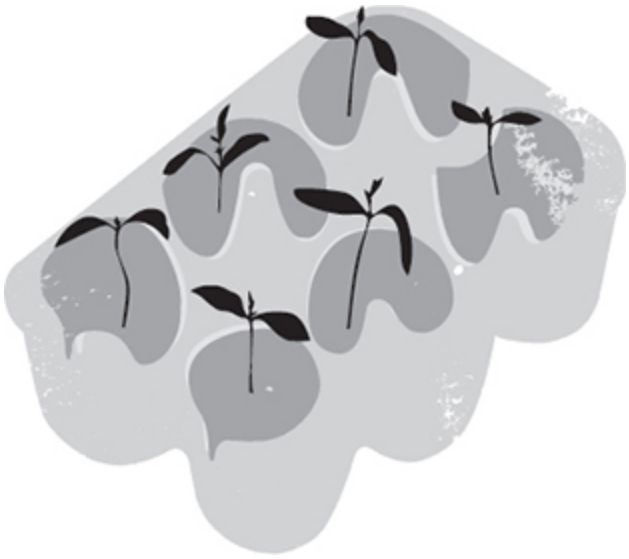
Paul Waddington



In memory of Helen Stuffins, a great inspiration and a great friend

Acknowledgements

I would like to thank Susanna Wadeson, who decided that this book's time had come, and the rest of the team at Transworld and Eden who also made it happen: Sarah Emsley, Mike Petty, Gavin Morris and Brenda Updegraff. Thank you too to Gillian Blease for the beautiful illustrations. Being a complete novice in so many of the subjects covered by the book, I have many experts to thank: Simon Saggers, whose beautiful smallholding is an inspiration and whose garden designs in this book will hopefully inspire others; Simon Fairlie for his expert advice on smallholding; Michael and Julia Guerra, who show how to create abundance from small spaces; John Chapple, a bee guru; Tony York for his pig expertise; and Caroline Muir for letting me get to know her urban chickens. Adrian Evans and Helen Stuffins were inspirational and instrumental in shaping my views on sustainability. Peter Harper from the Centre for Alternative Technology provided a pragmatic corrective to the less practical extremes of 'green' thinking. Biologist David Perkins showed how beautiful biodiversity can be created in the most urban of spaces; Penney Poyzer and Gil Schalom demonstrated how a Victorian house can become an eco-home; and Will Anderson shared his experience of creating an eco-friendly house from scratch. Thanks are due, as always, to my agent Sappho Clissitt; and to my wife and sons, Fiona, Finn and Fergus, who were a source of joy and support throughout.



Who wants to be a 21st-Century Smallholder?

Many of us dream of ‘four acres and freedom’ the idyllic, self-sufficient life in which we flee the city to live in harmony with the land, dependent on no-one. For all but a fortunate few, this is now an impossible dream. Absurd property prices have put four acres and a farmhouse out of reach of anyone lacking a six-figure sum of capital. Today, only the rich can afford to be peasants.

But a way of life that reduces our impact on the planet whilst also improving our quality of life has never been more sorely needed. Look at any aspect of modern living and there’s a very good reason for doing things differently.

The food we eat now comes from a handful of gigantic retailers. Their demand for an uninterrupted, year-round supply of cosmetically perfect produce is turning our countryside into an agribusiness factory. Our food chain is now entirely dependent on fossil fuels: first, to manufacture the pesticides and artificial fertilizers without which industrial agriculture fails; and second, to power agricultural machinery and the enormous, road-based transport infrastructure that delivers food from farmer to warehouse to supermarket. As Felicity Lawrence points out in the food industry exposé *Not on the Label*, just a few days without fuel would bring this country's food supply to a standstill.

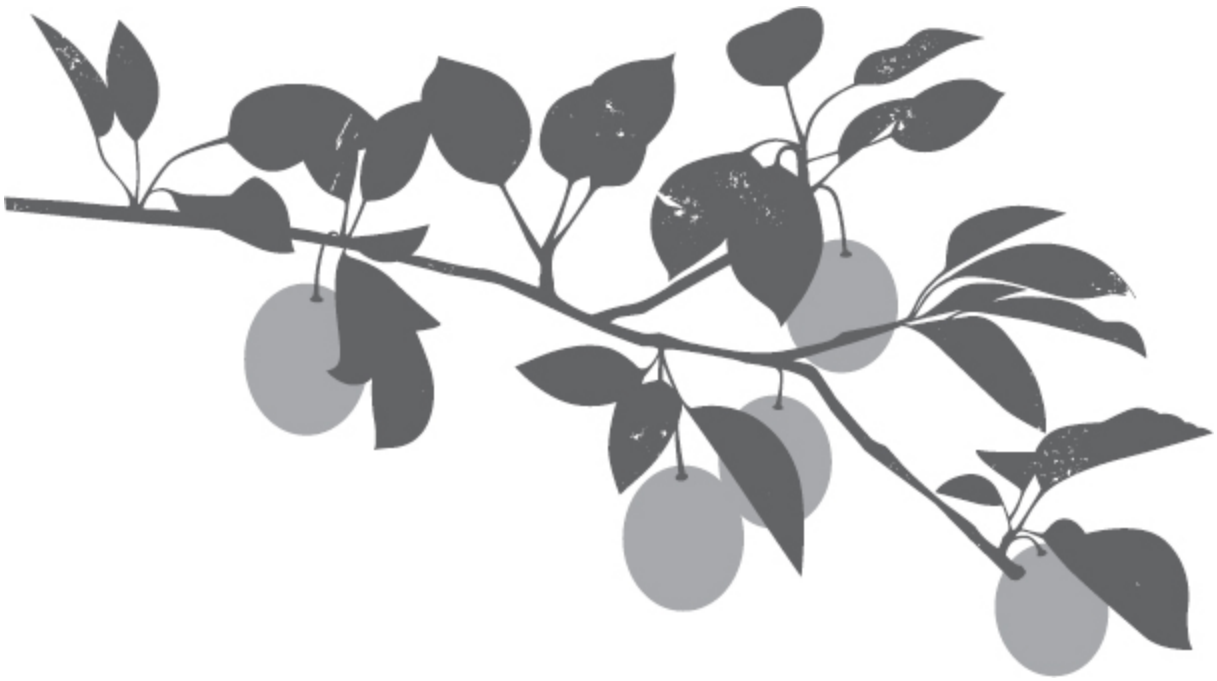
So the modern food chain is insecure. It's also killing us: polluting the environment with runoff and residues, decimating biodiversity and – as we are now beginning to learn – giving us produce that is depleted in the minerals and micronutrients that make it worth eating in the first place. Is a lettuce that is grown with artificial fertilizer, slathered with pesticides, then chilled and trucked around the place for a few days before spending a week in the fridge going to be as good as the one just picked from your garden? The evidence suggests not; and intuition screams it. Growing your own is more than just a nice idea.

Then there's the way we use energy and resources. Our homes are responsible for a third of Britain's CO_2 emissions. Almost all are highly dependent on energy sources that are not only insecure and nonrenewable but whose use is also – the evidence is now overwhelming – transforming our climate into something that could even become hostile to much of humanity in our lifetimes. It would take three planet Earths to support the entire world's population living as the British do. Thinking about reducing energy and resource dependence is no longer the

preserve of the thrifty smallholder; it’s something we could all benefit from, now and in the future.

Many of us dream of living differently because we can see what our Western lifestyles are doing to the environment. But I think we also aspire to peasantry because we instinctively feel that there is deep satisfaction to be gained from tasks that the consumer society would file under ‘drudgery’: growing and preserving food, animal husbandry, or managing your own water and energy resources. Our national fondness for gardening and pet ownership – scorned by nations that are closer to their pre-industrial pasts – surely points to a longing to be closer to nature. We have become ‘de-skilled’ since we industrialized, losing our ability to live off the land. Today, that de-skilling has accelerated as our needs have become provided for by corporations. Even being a parent can be outsourced today. In a generation, we’ve forgotten how to

grow things, fix things, even cook from scratch. And we are all having to relearn about what food is in season when. If society collapsed tomorrow, only Ray Mears would survive. Skills that were once effortlessly handed down from generation to generation now have to be learnt through piles of books, lengthy courses or painful trial and error. But – as I have learnt – it's worth it. Few things beat the satisfaction of picking your own produce or knocking together your first beehive.



So perhaps we should all attempt to be self-sufficient at home in order to be healthy and happy and save the planet? I don't think so. Genuine self-sufficiency, in which you provide all your own material needs, is very, very tough. As the two case studies at the end of this book show, it requires a vast amount of learning, planning, investment and time, as well as a good-sized plot of land. If you had an immense garden, an iron will, accommodating neighbours and a complicit family, it might just be possible to emulate Tom and Barbara Good. Most of us aren't like this, though. And even if it were practical, I doubt whether widespread

self-sufficiency is really desirable. For a start, it would put out of business the small-scale farmers who are finding new outlets for seasonal, local and often organic produce through farmers' markets and box schemes.

In between the Goods and the people who rampage from shopping mall to ready meal in a monster 4x4 is the 21st-Century Smallholder. You don't need four acres to be one; nor do you need vast amounts of capital and time. You won't be self-sufficient; but you'll grow and do the things that suit your home and your life. If you have a small flat, then maybe your window boxes could keep you in salads and herbs. If you have a small garden, perhaps you'll use part of it to grow gourmet fruit and veg that are best when just picked, and maybe have some chickens scratching around the place. And if you're fortunate enough to have a lot of outside space, then you may well be eating your own produce for much of the growing season; there might be bees . . . or even pigs. And wherever you live, you could be harvesting rainwater, making your own compost, saving – even generating – energy and turning your home into a wildlife haven.

Why be a 21st-Century Smallholder? There's a long list of good reasons: here are just a few. It's deeply satisfying. Whether it's your first home-grown salad, home-laid egg or solar-heated shower, there's a great sense of achievement to be had. Being a 21st-Century Smallholder also makes your house and garden look beautiful and attract wildlife. A productive fruit and veg garden is a nicer place to be than a desert of decking, both for you and for the countless bugs and creatures that run our ecosystem. If you grow and raise some of your own food and manage some of your own resources (like water and energy), it reduces your dependence on our damaging consumer culture. It may only be a token reduction – cutting yourself off from the

mains, for example, is not something to be undertaken lightly – but it feels good; it feels like taking control in a world where the power to run one's day-to-day life is being reduced to nothing more than consumer choice. Finally, it's good to feel like part of the solution. Your water butt may not solve the world's freshwater crisis; your home-made compost may not save the peat bogs; and your solar panels might not stop the glaciers melting; but big changes start with lots of grassroots actions.

It doesn't have to take much time, or cost much money, to be a 21st-Century Smallholder. You can start growing fruit and veg on a shoestring budget; and many of the actions that most reduce your environmental 'footprint' are free and will save money. Solar electricity, big food-growing operations, 'eco-retrofitting' your house: these things do cost money. But there's something for everyone in the 21st-Century Smallholder's lifestyle. However far you want to go, this book is designed to help you along the way.

So how much of a 21st-Century Smallholder is the author? At the time of writing, not much at all, I'm afraid. Being on the verge of a long-distance house move, I've handed the allotment plot on to the next eager person on the enormous waiting list and donated the bees, which are unlikely to enjoy the journey, to another beekeeper. We still have a minor fruit and veg operation in the back garden and are still happily composting away. We should be at our next destination for a good few years so there will be a productive garden, possibly bees and chickens, and a house with every eco-modification we can afford. And the car, on the relatively rare occasions it gets used, still runs happily on filtered waste-vegetable oil.

GROWING YOUR OWN FOOD

Why grow your own food?

It’s a very good question. After all, growing food is what farmers are for. Unless we have lots of land and lots of time, why should we bother? Glossy utopian gardening books and self-sufficiency manuals rarely point out the downsides of growing your own food, so let’s start by being practical and looking at the pitfalls as well as the pleasures.

Five reasons not to grow your own food

It can cost a lot to get started

In the past, nobody started growing from scratch. Our peasant ancestors inherited everything from their forebears. They didn’t really need to buy land or equipment or go on gardening courses: all the kit and the skills they needed were handed down from generation to generation. Today’s aspirant grower, hemmed as she or he often is into a small house and garden, usually has a lot of stuff to buy, from garden tools and propagating gear to soil improvers, sheds, water butts – the list is endless.

You won’t save much money

In Victorian times, the price of food meant that growing your own would have saved up to 50 per cent of your annual expenditure. Today, we spend only around 10–15 per cent of our income on food and only a fraction of this goes on the stuff you could grow in your garden. If you

really want to save money on food and drink, be a teetotal vegetarian.

You will not achieve self-sufficiency in anything other than salads and herbs

Even if we adopt the ‘Mediterranean food pyramid’ – a diet in which cereals, pulses and vegetables predominate and animal protein forms only a small part – it is very tough to be truly self-sufficient in food, particularly from a small space in a temperate climate. If you give up meat, accept that all your carbohydrates will come from potatoes (which store well and can give bulk yields in small spaces), and brace yourself for lean times and preserved or frozen food in the April–June ‘hungry gap’, then it’s maybe do-able. But desirable? Probably not.

It takes time, particularly when you want to go on holiday

Peasants who learnt to grow as they grew up did not have to invest much time in getting started; and strong social and family networks meant that an equally skilled person was always around to help. Leave your veg garden alone at the wrong time of year, though, and weed apocalypse could greet your return from holiday. Growing food does need an investment of time, often when you least have it.

Children aren’t always compatible with horticulture

Few things are more distressing than watching a small child innocently upend a module tray full of carefully tended seedlings. A garden largely given over to growing is not always somewhere in which you can relax with offspring. Compromise is needed to keep parents, kids, fruit and veg happy.

But if you can cope with these downsides, there are of course many, many good reasons for growing your own which far outweigh the disadvantages.

Five reasons to grow your own food

It is deeply satisfying . . .

Even if it's just the one radish that escaped the slugs, the satisfaction of eating your own produce is enormous and hard to communicate to those who haven't given it a go. And the more time and effort you invest in raising a particular plant, the better it feels when you finally eat its produce. Knowing how much effort it can take to get, say, a humble sprouting broccoli plant from seed to plate (propagating, transplanting, protecting – over maybe ten months) also gives a deep appreciation of the value of food.

. . . and very healthy

More is being discovered all the time about the true nutritional value of food. And the evidence suggests that modern, industrial agricultural techniques not only damage the land and expose us to pesticides and herbicides: they have also depleted both the mineral and micronutrient content of vegetables and fruit in the last fifty or so years. Buying seasonal, local organic food helps avoid this; but growing your own gives you total control over what goes into your food. The nutrient content of fruit and vegetables is optimal when they have just been picked. Plus, of course, you get to spend time exercising in the fresh air.

You will have new gourmet experiences

We are accustomed to buying food, refrigerating it and then eating it when we're ready. And if it's from a

supermarket, it has already spent far too much time on the road and in a fridge. For many vegetables and fruit, this does terrible things to their nutritional value and to their gourmet appeal. The garden, however, keeps fruit and veg in perfect condition, so if you get into the habit of picking and eating straight away, the quality is streets ahead of anything you could buy in the shops. For particular produce: herbs, salads, tomatoes, soft fruit (see here for a table with a 'gourmet value' rating) this is absolutely crucial.

You can stick two fingers up at the modern food industry

Every time I pick a sprig of thyme from the garden I think of over-packaged herbs grown in a monster high-tech greenhouse somewhere and sold for a ludicrous price by supermarkets. And I rejoice in the small victory of depriving these undeserving behemoths of a tiny bit of revenue. If you hate the modern food chain and what it's doing to the land and to communities, then growing your own is a small, maybe insignificant, but satisfying political act.

You will learn a great deal and develop new skills

In learning to grow food, you inevitably find out a great deal of fascinating stuff about nature, from soil composition to the role of flora and fauna to weather and seasons. This is satisfying in itself; and it also brings you closer to the seasons and the cycle of life in a way that introduces constant variety and interest into your life. And of course you learn a whole range of skills – composting, planting, amateur weather forecasting – that enrich your life and can be passed on to others.

What are vegetables and fruit?

Before I started growing fruit and vegetables I knew very little about how, why and when they grew. And I found that many gardening books seemed to skip this fundamental information and dive straight into gardening techniques and principles.

If, as I was (and still feel!), you are a complete newcomer to edible gardening, then I think it's worth going right back to first principles and taking a quick look at what fruit and vegetables are, and how they behave through the year. It's not essential to help you plan your time: but it's useful and perhaps interesting background.

Most of the vegetables that we grow are 'annuals', which means that the plants die off every year, having put all their energy into setting (producing) seed. We eat this energy (which is contained in different parts of these vegetables) at different points in their seed-setting cycles, depending on what's best. So with 'leaf vegetables', like lettuce and cabbages, we eat the leaves because these are good and the seeds are tiny. (However, rapeseed oil – made from the seeds of a cabbage relative – forms a huge part of the

modern food chain.) With peas and beans we eat the immature seeds. Sometimes we eat the unopened flowers (as in broccoli); or the stems (celery); or the root (parsnip, carrot). And sometimes we eat the ‘fruit’ that contains the seeds, as with tomatoes, cucumber or pumpkins.

Temperature and day length are the main factors that affect when things grow. Below 6ºC, plants are dormant and nothing grows: so in the depths of winter in Britain the growing season grinds to a halt. (Global warming is, however, rapidly bringing a year-round growing season to much of Britain.) Increasing day length from January onwards kicks off the growth of a small number of plants (such as rhubarb) that respond to this. And then increasing warmth prompts more natural growth and eventually heats the soil enough for planting many things outside. By May, weeds are in aggressive competition with your young vegetables. The first, early outdoor crops are ready by May and June, and then, as the summer warms up, more and more produce becomes available. By August and September, peak harvest season, sowing and planting activity starts to tail off, and into the autumn the business of preparing the soil for the next year’s growing season starts up.

Over the centuries we have selectively bred different types of vegetables – and taken advantage of their different characteristics – to provide us, as much as possible, with a year-round supply within the constraints of our temperate, four-season climate.

Root vegetables such as carrots, parsnips, swede and turnips store goodness in their roots over the winter to power a vibrant flowering in the spring. We take advantage of this concentrated nutrition, either lifting and storing the roots when they are ready or leaving them in the ground

until we want to eat them. The same principle applies to leaf vegetables: we take the energy stored in their leaves before they flower and turn it to seed. For fast-growing salads, this means a quick meal, early on in the growing season. And for hardy, slow-growing winter cabbages, it means fresh greens in the coldest months. Pea and bean plants, well-adapted to our climate, flower and set seed early in the growing season, enabling us to eat their immature seeds in the early summer; whilst non-native 'fruiting' vegetables like tomatoes need more heat and light to come to fruition.

Fruit, on the other hand, is perennial, growing on trees and shrubs over many years, depending on the species. So because fruit has to complete a cycle of growth, flowering and fruiting before it's ready to eat, it tends to have a short season, during – and mostly towards the end of – the warmest months in our climate (unless we cheat nature with greenhouses and heating).

There are also perennial vegetables, which present the edible gardener with a low-effort (if sometimes space-intensive) food-growing option. Artichokes, asparagus, sorrel and rhubarb (botanically a vegetable) are just four examples of plants which, once established, will continue cropping in their seasons with minimal intervention from the gardener.

It's not essential to know all this background information in order to plan your edible gardening time. But it's helpful. If, for example, you have very little time to spare through the year and spend lots of time away, then the best strategy would be to concentrate on fruit trees and bushes and perennial vegetables. Such a food-growing operation can take a long time to establish itself (the trees have to grow and mature) and its yields are lower and concentrated

more on fruit. But there's much less need to worry about maintenance and, crucially, no need for sowing, propagating and planting once it's established.

Grow annual vegetables and you will need more time, depending on what you want to eat. A simple balcony-based salads and herbs operation won't take much time at all. But growing annuals to get a constant year-round supply of fresh food does take a little more effort; and there are times when it's good not to go away.

The 21st-Century Smallholder's year planner (here) gives a full run-down of the edible gardening year and the time taken by other related things – such as beekeeping or pond-building – that you may or may not wish to explore. Read through this and you will quickly build up a picture of when different things happen, and which are the busiest and quietest months.

The table below summarizes in brief how the growing year pans out. In reality, many of these tasks go on all the time. But this gives a picture of how the intensity of work needed follows the growing season.

SOWING, PLANTING AND HARVESTING	J	F	M	A	M	J	J	A	S	O	N	D
Soil preparation												
Sowing/ planting												
Propagating												
Weeding												
Harvesting												
Watering												
Days per month*	1	1	1	2	2	2	2	2	2	2	1	1

*Very rough estimate for a large vegetable plot of, say, 100 square metres.

= lots of work needed = little work needed

Where to start?

Fruit- and veg-growing often seems like a huge and daunting subject and it is the subject of many huge and daunting books. Perhaps the easiest way to start is to consider your space. Do you have a window box, a balcony, a small garden or a big garden? Or maybe an allotment too? Does it get lots of sun? Lots of wind? Lots of rain? What's the soil like? Is there any? Even if it's just a window box, you'll be able to grow things all year round; but the size and nature of your space will help determine what to grow.

Then there's the question of what you want to eat. Perhaps it's things like tomatoes and strawberries that never taste as good as when picked and eaten straight off the plant. Or maybe you're after maximum yield, for example growing potatoes in a tub to get a huge supply from just a few square feet.

Finally there's the question of your time. How much do you have? Will it be a snatched fifteen minutes every evening, or an afternoon a week? Or more? And on the subject of time, how long can you wait? Six weeks for some salads to grow, or six years for a 'forest garden' to start establishing itself?

There are, of course, other variables to worry about: how much hassle a particular plant is to grow, how long its season is, how good it looks… but space, time and what you want to eat will help you to make some practical choices to get started.

The table here 'scores' fruit and veg according to these factors: browsing through it will give you an idea of what things will suit you and help you to decide where to start with growing your own food.

VEGETABLE		COMMENTS
Artichoke, globe		Easy to grow (it's a thistle), tastes great, looks good too, but each plant takes up a great deal of space.
Artichoke, Jerusalem		Very space-hungry but highly nutritious and a good crop for breaking up the ground.
Asparagus		Needs permanent, dedicated space and lots of time to mature. But perennial and with unmatched gourmet value.
Aubergine		Needs greenhouse, preferably heated. Not a natural for the British climate.
Beans, broad		Tough plant, easy to grow, great gourmet value, provides different delicacies throughout its season (pods, fresh beans, dried beans).
Beans, French		Slightly more finicky than broad beans, but great gourmet value and yield.
Beans, runner		A garden favourite, but there are things that taste better …
Beetroot		Easy to grow and can be eaten at various stages; also stores well.
Broccoli, Calabrese		The nutritional value of your own broccoli is (just about) worth the hassle of growing it.
Broccoli, sprouting		Space-hungry and with a long growing season, but provides a superb delicacy in late winter when little else is fresh.
Brussels sprouts		Need a lot of room, but taste great and stand through the winter.
Cabbage		The huge variety of cabbages can provide fresh veg all year round, but plants can be space-hungry.
Cardoon		A gourmet treat, but only for those with room to spare.
Carrots		Can be tricky to grow and prefer lighter soils.
Cauliflower		Pest-prone like all brassicas and needs a lot of water. Long growing season.

Key: 

VEGETABLE		COMMENTS
Celeriac		Long growing season and hard to produce a big bulb.
Celery		'Trench' celery is hard work, self-blanching type is easier.
Chard		Easy to grow, looks lovely, tastes great and stands through the winter.
Chicory		Complex range of varieties; can be labour-intensive but fine eating.
Courgettes		Take up some space but very easy to grow and crops heavily.
Cucumber		Ideally needs to be grown in a greenhouse or polytunnel.
Endive		The taste of chicory without the hassle. A good year-round, small-space crop.
Fennel		Works best in warm areas.
Garlic		Hardy, space-efficient and very healthy.
Kale		A great standby through the winter: hardy and easy to grow.
Kohlrabi		Beautiful, tasty, not demanding of space and can be grown nearly all year round.
Leeks		A 21st-Century Smallholder's essential. Lots of tasty produce through the winter from small space.
Lettuce		Everyone should grow it: a cold frame or greenhouse extends the season nearly all year round.
Onions		Store well and give a good yield for the space they occupy.
Onions, spring		Tasty, handy and useful for small spaces.
Parsnips		Very long growing season. Needs same conditions as carrots. Magnet for insects if left to flower.

Key: ■ 3 (excellent) ■ 2 □ 1 (not so good)

VEGETABLE		COMMENTS
Peas		Nothing beats your own peas. Don't take up too much space but do need support. Also add to soil fertility.
Peppers and chillies		A greenhouse or windowsill proposition.
Potatoes		Vast yield available from small spaces; great tastes, too.
Radishes		Fast growing and fiery-flavoured: a salad essential.
Rhubarb		Needs its own (large) space but looks after itself once established.
Rocket		Easy and quick to grow, tastes great, an edible gardening must.
Sorrel		Perennial, hassle-free and one of the first interesting flavours of the growing year.
Spinach		Easy to grow, versatile, long season.
Squash (winter) and pumpkins		Needs space but can be 'trailed' between other plants. Great late summer/autumn treat and can store well.
Swede		Slow growing, likes cool conditions, a good winter standby.
Sweetcorn		Needs a good summer, but worth it for the unparalleled gourmet experience.
Tomatoes		Easy to grow but need feeding and watering, especially if in containers. Gourmet value makes it all worthwhile.
Turnips		Very tasty and the leaves can be eaten too. Reasonably space-efficient.

Key: Space Time Gourmet Season Hassle Beauty