

Raised beds for vegetables

GWF417 PUR
Updated Jan 09

Raised beds are simple to make and easy to maintain; use this method and you can achieve a weed-free vegetable plot where digging is a thing of the past.

Q What is the advantage of using raised beds?

A This method of growing vegetables has many advantages, especially on a small scale in a typical garden or on an allotment.

You can, in fact, operate a bed system without raised edges. The beds are never walked on and all planting, weeding and cultivating is done from paths on either side. This means that the soil structure is retained for several years, digging becomes a thing of the past and seedbed preparation is easier.

However, by enclosing these permanent beds in a framework, you can raise the soil level in them by 15cm or more. This increases the rooting depth for your vegetables on shallow soils and helps to improve the texture of any soil. Additionally, it helps to improve drainage so increases the surface temperature on cold, wet soils in early spring.

If you go the whole way, to a no-dig system, then further benefits are possible - an end to weeding and a soil with such a high organic content that you can grow almost any crop without the addition of fertilisers.

Q How should I go about planning raised beds?

A To start, measure the area of your plot and sketch a rough plan on paper. Paths are essential for access. The ideal width is 45cm - wide enough to allow access, but not too wasteful. Decreasing the width increases growing space, but using them can be difficult when the crops are full-grown.

The optimum width for the beds is 1.2m, which allows easy access to the centre from either side. Make them narrower or wider to suit.

You'll need to walk round the beds to get to the other side, so don't make them too long. As a rough guide 4m is about right.

Arranging raised beds in complicated designs may be visually appealing, but make sure you are not wasting valuable growing space or making access to the beds difficult. The simplest design of straight paths and long beds is most efficient.

You can make raised beds out of all kinds of materials: old railway sleepers, paving slabs, bricks or reclaimed timber are all fine. The basic principles are the same, though the execution differs. In the past, we have used treated gravel boards and posts with great success and will describe how to make raised beds using these materials.

Q What materials will I need and how are the raised beds made?

A From your rough plan, work out how much gravel board you'll have to buy. You may find that it comes in standard lengths and that you need to adjust your dimensions to avoid unnecessary waste. Use treated 7.5cm square timber to make the corner posts. Make them 45cm tall, so that 15cm supports the board with 30cm buried underground.

- ❖ Dig over and level the whole area, removing any perennial weeds at the same time.
- ❖ Mark the beds with canes and string. If necessary, adjust the design until you are happy.
- ❖ Before assembling the beds, scoop the top 7.5cm or so of topsoil from the paths and put it in the centre of the beds.
- ❖ If your soil is free of stones, hammer in the posts, leaving 15cm above the level of the path.
- ❖ Check that the posts are square and the tops level. With beds longer than about 2.4m, add an extra post to support the centre of the long side.
- ❖ Nail the side and end boards to the posts, using 5 or 7.5cm galvanised nails. Level the top of the boards with a spirit level.
- ❖ On stony soils, you may find it easier to assemble the whole frame on a path and drop the

posts into pre-dug holes. Check it is square and level before you pack soil into the holes.

❖ Use some of the spare soil scooped from the paths to top up the paths to about 2.5cm above the base of the boards (to help prevent them bowing outwards) and firm by treading.

❖ Finally, to prevent weeds invading the paths and save work in future, add a mulch. You could use a loose material such as gravel or chipped bark - about 2.5cm should suffice, topped up annually if necessary. Or you could use woven plastic material, nailed to the boards with battens.

Q What about the soil?

A Returning to the beds after a short while, you'll notice that the soil level is well below the top of the wooden frame. On most soils, simply digging the soil to a spade's depth and never walking on it will increase the depth. Adding plenty of organic matter will fill the remaining space.

If your soil is heavy and drains slowly, it may be worth double digging inside each bed in turn (you don't have to do all the beds in one go, but spread the task over several years). Dig a trench to one spade's depth at one end of the bed, putting the topsoil in a wheelbarrow or on to another bed. Add a generous amount of well-rotted organic matter to the bottom of the trench and work it

into the bottom with a fork. Dig another trench next to it; put the removed soil into the first trench.

Keep doing this until the whole bed has been dug and you are left with a trench at the far end. Barrow the soil from the first trench round to fill it.

This is hard work, but well worth it; if you don't walk on the raised beds, the soil structure will be retained for many years before you need to dig again.

Q How much maintenance will I need to do?

A When you have finished setting up your raised beds, you've done most of the work. In future, maintenance should become easier and easier. Because you can do all the cultivating from the paths, the soil structure will remain open - you won't need to dig it. In fact, digging can do more harm than good by bringing weed seeds to the surface. Any organic matter, fertiliser or water you add will be concentrated on the beds, not wasted on the paths.

In the first couple of years, flushes of annual weeds will appear with regularity. Keep hoeing them off until crops are well established. After a few years, weed growth will be less, because as long as you prevent weeds seeding, any seeds already in the soil should stay buried.

Every year or two, simply top up the beds with well-rotted

organic matter - spent mushroom compost is ideal because it is weed-free. This will not only smother weeds and retain moisture, but will be incorporated into the soil by earthworms.

When a crop is over, remove it with minimum disturbance (potatoes being an obvious exception) along with any weeds. With peas and beans, cut off the top growth and leave the roots to help feed the next crop. Roughly level the surface and you are ready to plant a second crop or a green manure crop. No digging and raking is needed - unless you like the exercise.

Q What about crop rotation?

A If you have three or more beds, you can practise crop rotation. But bear in mind that on a small scale, rotation is not a foolproof method of preventing soil pests and diseases.

An alternative is to make a note of what you grow where each year, and avoid planting crops that suffer from soil problems (potatoes, brassicas, onions) on the same bed for at least three seasons.

It does make sense to group crops, for example those that need lots of water, fertiliser or organic matter. You can also group early maturing crops, so that the bed can be replanted with late crops in one go.