



# THE BEGINNERS' GUIDE TO polytunnels

They have divided the gardening community: Monty Don called using large-scale polytunnels in farming 'monstrous' while Hugh Fearnley-Whittingstall is an 'evangelical convert'. But what benefits do the plastic growing houses have for home growers? And are they a viable alternative to a greenhouse? **Words by Andy McKee and Mark Gatter**

**Providing an area for growing under cover is possibly the single most important change you can make to a plot.** And because polytunnels – long plastic-covered tunnels – are much cheaper than greenhouses, whatever your budget is you can afford a bigger one than if you'd taken the glass route. It would be easy to think this just means more space for heat-loving crops like tomatoes and melons. But if you're looking to grow your own all year round, the impact of a polytunnel on your winter and spring diet is just as valuable – if not more so. This is where a greenhouse is less useful – most home-growers can only dream of owning one big enough for a sizeable double row of broad beans for a crop in early May, for example.

When it comes to value for money, the beauty of polytunnels is that they become proportionately cheaper as they get larger. They're available in sizes as small as 1.8 x 2.4m (6 x 8') but it's when you start to think that little bit bigger that they really come into their own. A gardener contemplating a 2.4 x 3m (8 x 10') glass greenhouse could expect to pay about

three times the price they'd pay for a similar-sized polytunnel: about £300. And that's after factoring in all the accessories we recommend. If you're tempted to scale up – and have the space to do so – you can buy a 4.25 x 8.5m (14 x 28') model with all the trimmings for a little over two thirds of the cost of that much smaller 2.4 x 3m (8 x 10') glasshouse. The cover will need to be replaced every five years or so, but replacements are only a fraction of the original price. Those old covers, by the way, can be cut up into sections and recycled anywhere



that will accept regular plastic bags. Greenhouse panes – which are usually made of glass or the much sturdier option of polycarbonate – obviously don't need to be replaced, as long as they don't get damaged.

## Selecting a location

Once you've got your heart set on owning a polytunnel, your first point of contact shouldn't be a supplier of one but rather your local council's planning department. The chances are you won't require permission for most domestic tunnels but the rules vary throughout the country.

If you're planning on putting a polytunnel up on an allotment, then it pays to be persuasive – not only will you need to get the nod from the management committee, but also from adjacent neighbours whose plot may be affected by the shade or water runoff which your tunnel may create. Don't underestimate the power of cooperation; offering to 'bring on' a few extra trays of seedlings in spring for neighbouring plots genuinely might make all the difference to popular opinion.

## Cleaning polytunnels

- Light is the key element for successful growing in a polytunnel, so keeping the cover clean is essential. A coating of green algae will form over the skin after just a few months of damp weather, meaning it should be cleaned at least once a year. This is especially important in early spring when you want to make the most of the low light levels.
- If you have a 3m (10') wide tunnel you can clean the outside with a mop, but if it's any wider you'll need to 'floss'. This requires two people, a couple of lengths of soft rope and an old sheet. Roll up the sheet and tie a length of rope to each end. Dunk the sheet into a bucket of plant-safe detergent such as Citrox and flip it over one end of the tunnel like a skipping rope. The two people then take it in turns to pull, dragging the sheet backwards and forwards over the cover. Algae inside the tunnel is easily dealt with using a long-handled soft mop or sponge.
- Most of the effort involved in maintaining the inside of a tunnel is in keeping it clear of debris and maintaining decent airflow. Dead and unhealthy plants can harbour pests and moulds, which can spread quickly in humid conditions. Your only weapon against humidity is ventilation, so in good weather open the tunnel doors during the day.

In your own garden, you have more options. In general, the flatter the site, the better. Although you can erect a tunnel on a gentle slope so that one end is higher than the other (in fact, on heavy clay soils doing so can be helpful for water drainage), the ground must be level from side to side. Good access around the doors is essential, and a few feet of clear space all the way round is also helpful for cleaning and re-covering. There are other factors to consider too, but make sure you have access to water no more than a few steps away (see water and air, overleaf) and avoiding dense shading, particularly to the east – early morning sunshine is vital to quickly lift internal temperatures after the chill of evening.

## Types of tunnel

The basic polytunnel is a simple single-span structure made from hoops supporting a polythene film. This makes a bubble of still air which is quickly warmed by solar energy, creating a warm microclimate; basically, it



is a walk-in cloche. Cheaper models have curved sides which mean a certain amount of wasted space, and unless your tunnel is very wide it is well worth paying a little extra for straighter side sections.

A more sophisticated design is the Solar tunnel. These have tough covers made from PVC with an embedded green mesh, giving a softer appearance, better insulation and a significantly longer life than a regular polythene cover.

Keder houses are the Rolls-Royce of polytunnels. The walls are a sandwich of bubbles between rigid plastic sheets, they are guaranteed for 10 years and typically last about 15. Keder houses combine the advantages of both greenhouse and polytunnel, being straight-sided, very well insulated and practically airtight when closed – a real boon on freezing winter nights. The biggest drawback is price, as the houses cost around five times as much as a typical polytunnel of the same size.

## Choices of cover

When it comes to cover choices for your tunnel, the most basic option is a simple clear polythene sheet – but make sure that it's specifically designed for

polytunnel use. That will mean it has UV stabilisers and an additive to diffuse the light (an 'opacifier') to help eliminate plant scorch – a problem that dogs greenhouse owners who have to use shading paint or blinds to achieve the same level of protection. Almost all the light hitting the cover will get through, although light transmission through any cover tends to fall a little each year, even when it is regularly cleaned.

Coping with the build-up of condensation on the inside of polytunnel is part and parcel of owning one. It is controlled by ventilation, which helps to regulate both temperature and humidity.

However, you can pay a few pounds extra for covers which have special coatings such as THB (Thermal Heat Block), which help prevent the formation of condensation as well as allowing the tunnel to retain more heat. If you intend to grow vegetables through the winter, they can prove invaluable.

Other types of cover help to prevent pest and disease problems by filtering out specific frequencies of UV light which are essential for the vision of many flying insects and the growth of some moulds. However, they will also reduce the activity of beneficial insects such as pollinators, which may be important to

## Polytunnel accessories

The range of extras sold by polytunnel retailers can be a bit bewildering, but it is also what makes tunnels such versatile structures.

- The metal framework of a polytunnel can become incredibly hot, making padded anti-hotspot tape essential to get the best life from your cover. It is stuck to the frame and provides a buffer between the hot metal and the polythene – which would otherwise erode more quickly due to the heat. The slippery surface also allows the cover to slide over the framework more easily when you're putting it up. Almost as important is polythene repair tape, which can stop minor tears becoming major ones.
- You can add strength to the structure by fitting storm braces – small strengthening joints – and

crop bars – horizontal tubes fixed across the tunnel above head height. They also provide handy attachment points where you can tie on string or wire as supports for climbing plants.

- Ordinarily, the polythene cover is buried in a 30cm-deep trench that needs to be dug right the way round the polytunnel. But you can save yourself a lot of effort by using base rails instead – they run round the structure at ground level and the edges of the cover can be clamped into them. If you choose a base rail though, then securing the ground tubes at each corner with concrete is advisable in order to stop the structure lifting or sinking. As a less permanent alternative you can use anchor plates instead, square steel sheets which clamp the corners of the tunnel onto the ground.

## POLYTUNNELS ARE AVAILABLE FROM:



- **First Tunnels**, 01282 601 253, [firsttunnels.co.uk](http://firsttunnels.co.uk). Prices from £222 with some customers qualifying for free delivery.

■ **Keder Greenhouses** – 01386 49094, [kedergreenhouse.co.uk](http://kedergreenhouse.co.uk)



- **Knowle Nets**, 01308 424 342, [knowlenets.co.uk](http://knowlenets.co.uk). Prices from £225 including delivery.

■ **Northern PolyTunnels** – 01282 873 120, [northernpolytunnels.co.uk](http://northernpolytunnels.co.uk)

your crop (nearly all plants grown for their fruits or seeds need to be pollinated). Unless you're specifically aiming for the cultivation of shade-loving plants or small, bushy bedding plants, avoid using 'smart green' or 'smart blue' covers, as these are the respective uses for which they're intended.

### Putting up a polytunnel

So, let's assume you've cleared the site, the kit has arrived, and you have a few sturdy friends on hand to help. It's the big day, and it's quite likely to be a long one. It will, however, be a much shorter one for all concerned if you've done some assembly beforehand – bolting the frame together, making the doors and possibly the door frames too, and of course anchoring the ground tubes (the metal tubes which are sunk into the ground, onto which the hoops fit).

Once these tasks have been completed, the manufacturer's instructions should always be followed to the letter. All tunnels are similar, though: the hoops fit into the ground tubes, the central ridge-pole or 'backbone' of the tunnel is bolted into place, and the side braces are added. Don't even consider trying to put the cover on if there's so much as a breeze – you don't want the wind to play any part at all in this final stage or the whole lot is likely to take off. Covers can be held in place either by bedding them into a trench, or by securing them to a base rail attached to the hoops (see polytunnel accessories box, page 61).



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### Water and air

As soon as the cover is on your tunnel and you've got anything growing inside, you need to begin a regular

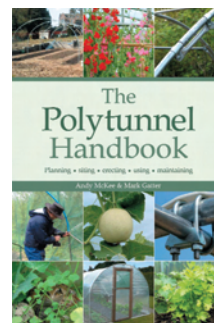
watering regime. Plants are able to withstand the high temperatures inside a tunnel, but only if they have enough moisture. The amount of water needed in hot weather is quite considerable and for this reason it is important to have a source of water no more than a few steps away from the tunnel – and a backup plan, in case your regular supply temporarily dries up.

Providing adequate ventilation from the very beginning is also vital. For 1.8 x 2.4m (6 x 8') tunnels, a single door which is left open during the day is enough, but for anything larger doors at either end – preferably wide ones – are a must, to get a through-draught. For very large tunnels, anything more than 400 square feet, additional ventilation is a good idea. The two main options are side netting and ridge vents.

The first requires the tunnel to be fitted with side rails (which should be at about waist height) so that while the majority of the frame has the standard polythene cover, the bottom section can have an extra layer of netting fitted underneath. The polythene can then be rolled-up and held in place to reveal the (pest-proof) netting and so increase the amount of air that's let into the structure.

A ridge vent is a metal pipe that runs along the top of the polytunnel and out through the cover at each end. The pipe is perforated, so when the tunnel gets warm the hot air rises and trickles out the top, while cooler air is pulled in through the doors.

### USEFUL CONTACTS



■ Andy McKee and Mark Catter's complete guide to planning, siting, erecting and using a polytunnel, *The Polytunnel Handbook* is out now, published by Green Books and priced at £10.95. It also boasts an easy-follow money-saving guide to building your own frame from scratch. It's available from all good bookshops, or you can order a copy from **Central Books, 0845 458 9910**. Alternatively, buy online by going to [greenbooks.co.uk](http://greenbooks.co.uk)

■ **Citrox** is an organic disinfectant for garden use made using citrus extract. **The Organic Gardening Catalogue, 0845 130 1304, [organiccatalogue.com](http://organiccatalogue.com)**

■ **Roottrainers** are deep plastic modules for filling with seed compost and sowing into. They have internal ridges that direct root growth downwards. **Ronaash, 01573 225 757, [roottrainers.co.uk](http://roottrainers.co.uk)**

