



Fig. 1 Our polytunnel

Plastic has been around all my life and, until recently, I bought and used it without much thought. It was only a few years ago I became aware that virtually all the plastic that has ever been created in the world is still in existence. When we bury it or chuck it into the sea it breaks down into smaller and smaller pieces, but it does not fully degrade or disappear. This came as quite a shock to me, and took some thinking about.

In recent years the press have (rightly) focused on reducing single-use plastic and plastic packaging in general, and on boosting its re-use and recycling. In response, I have taken actions in my own garden that are the subject of this article. I am still far from certain that my approach is the correct one, but I hope that the

following paragraphs may stimulate a conversation, and potentially some answers, from among our membership. I would stress though, these are just *my* thoughts, about *our* garden.

When I started making a list of all the plastic I use in the garden, I realised it was a lot! While I do try to get the most out of each item, I definitely rely on the stuff. Starting with plastic wheelbarrows; tubtrugs; water butts and pipes; guttering; hosepipes and reels; plastic netting

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Using plastic in the garden

Sheila May

on my deer-proofing fence, fruit cage and winter greens net tunnel; our polytunnel; the butyl liner in our pond; horticultural weed-suppressing membrane and fleece; plant pots, trays and plant labels; plastic sacks containing multipurpose compost, blood fish and bone etc, and plastic bottles of plant food. None of the above is single-use: they are either infrastructure or for long-term use. But some are useful only for a relatively short time.

Surely we cannot simply say that all plastic use in the garden is wrong and must be stopped? If we are not ready as a society to abandon plastic forever, must I do this in our garden?

Let’s start with the infrastructure and long-term items. Is it better to have plastic guttering and water butts to collect rainwater for use in the garden,

or not to collect the rainwater at all, and just use tap water? Some of the old guttering on our house is made of heavy, rusty old iron. I have never bought new metal guttering; it always seems to be replaced with plastic, which is low - or no maintenance, instead of metal which needs painting with oil-based paint every few years. Our *Asplenium scolopendrium* plants aren't worried about plastic, growing as they do behind this downpipe near our back door (fig. 2).

To ask the question in another context: do the benefits of having a wildlife pond outweigh the fact that it is lined with a butyl liner? I don't know. I do know that for us there wasn't a viable alternative – we hadn't the means or budget to use puddled clay. The options were either a pre-formed plastic insert, or a butyl liner. Our pond is filled with native and near-native plants, providing colour and attracting red damselflies among other wildlife (fig. 3). The damselflies are laying eggs under the leaves of the water soldier, *Stratiotes aloides*. You can also see the purplish leaves of water mint, *Mentha aquatica*, to the left, as well as the small round leaves of frogbit, *Hydrocharis morsus-ranae*,



Fig. 2 *Asplenium scolopendrium* by the downpipe

and of course duck weed, *Lemna minor*.

I use an assortment of re-purposed buckets and other plastic pots as 'holding' pots for plants, either to grow on to size, or until the bed they are destined for is ready. Fig. 4 shows the bamboo, *Fargesia robusta* 'Asian Wonder' in yellow buckets,

with our Christmas tree in the green pot on the left and rooted honeysuckle cuttings growing on in black pots on the right. The bamboo were planted out in autumn 2019, and fig. 5 shows how one of them has grown by May 2020.

I mentioned that we have a polytunnel (fig. 1, behind the viper's bugloss,



Fig. 3 The pond in May



Fig. 4 *Fargesia robusta* 'Asian Wonder' in temporary quarters in early July 2019



Fig. 5 *F.r.* 'Asian Wonder' in its new bed

Echium vulgare, in June 2020). It is unheated, and we use it to extend the growing season for our edible crops. No air miles, no out-of-season crops. We also have a glass greenhouse



Fig. 6 Tomatoes growing in the polytunnel

by the house – a 2.4m x 3m lean-to attached to the back of the garage. The polytunnel measures 6m x 3.7m, and cost a fraction of what a glass-house of similar size would.

The polythene cover was guaranteed for five years, and came with a roll of repair tape (like Sellotape) which we used as needed to keep the original cover going from March 2005 until March 2019, when we finally decided it had to be replaced. We have kept the old cover, in the hope that sections of it can be used to make cold frames or smaller tunnels in the future.

We grow our tomatoes in large black buckets and white paint or grout pots (cleaned out), with drainage holes added. These sit on large black plastic trays filled with gravel in the polytunnel (fig. 6) – all are re-used from year to year. The paint pots become brittle more quickly than the buckets, but a local painter/decorator supplies us with more as needed. The floor of the polytunnel is covered with horticultural membrane, which we also use under our decking steps in our gravel garden. Our neighbour has supplied us with his old cast-off pieces too: we use them to suppress weeds over winter, and to protect our meagre chalky soil from washing away during heavy winter rains. They become ragged at the edges but are still working well for us.

Perhaps you can tell from the above I was brought up to make do and mend, and to use something until it gives out – so when I empty out a container,

I look at it and wonder 'what could I use that for?' Most of my plants come in as divisions or cuttings from friends and family, and I propagate constantly, also growing a lot of plants from seed. To do this (and to pot on seedlings) I use plastic mushroom pots as half and quarter seed trays (figs 7 & 8).

On the right in fig. 7 you can see I also use the cardboard tubes of toilet rolls and kitchen rolls for pots (substitutes for rootainers for beans, sweet peas etc as they are nice and deep). My husband doesn't like them: he claims they don't rot down enough to allow the roots to grow through – though this might be more to do with them not getting enough water once in the ground. There is a different problem with pots made from newspaper folded round a solid former – I find these disintegrate before the seedling is ready to plant out, making root disturbance inevitable.

Fig. 8 shows some of the different forms of plastic I use in the garden, starting with the mushroom pots, with holes punched into the bottom for drainage, which I re-use until they disintegrate. Next, the small plastic pots, which are used again and again until they split and can no longer hold compost. My neighbours give me their empty



Fig. 7 Pricked-out seedlings

plastic pots when they buy bedding plants, and I use them (especially the four-pack bedding trays) to pot on tomatoes as they are comparatively shallow-rooted when young. All these pots are washed out and reused again and again, but they are nearly all black plastic, which as we now know is not currently recyclable.

I also use plastic labels, and I have a lot of them. I can use them again and again by rubbing out the old pencil marks and re-writing the current information, or bleaching off the permanent marker writing if they came from someone else, but they eventually become brittle and snap. My neighbour, who also propagates a lot, experiments with cutting



Fig. 8 Sowing seeds



Fig. 9 *Cotoneaster lucidus* with *Heuchera* 'Marmalade'

up yoghurt or cottage cheese pots to make labels, or splits bamboo canes in half for us to write on. The

homemade plastic labels have very sharp edges and I regularly cut myself on them, so I would not recommend them if you have young helpers around. I find bamboo canes and lollypop sticks are hard to read, and they rot quickly and snap at compost level, but at least they then go into my compost heap.

The watering can in fig. 8 is obviously plastic (and so are our hose reels), and while I also have metal watering cans, they are much more expensive to buy. We use our hoses for many years, cutting out and splicing the leaking bits until the hose is too short to reach where it needs to go.

Having achieved 'a certain age', I now find it quite difficult to lift large terracotta pots, even when they are empty, and I started half-filling them with polystyrene packaging to reduce the weight. I was persuaded to desist from this by my husband who has taken against the polystyrene, partly because the red ants make their nests in them, and he was forever getting bitten. He also thinks it negatively affects plant growth. So now I buy large decorative plastic pots instead, as they are much lighter. Fig. 9, taken in June 2020, shows a seedling of *Cotoneaster lucidus* sharing a plain but



Fig. 10 Just a few pots....

attractive plastic pot with *Heuchera* 'Marmalade'. This is the first year I have really noticed the flower spikes on the heuchera, rather than the foliage which is what I grow it for.

Another problem with terracotta pots on a windy hillside is water loss through the clay, which doesn't happen with plastic ones. Officially though, I am cutting down on the number of decorative pots in the garden, and trying to plant everything into the ground. I try not to include pots in any new part of the garden I am designing, but each year our Mediterranean courtyard is overflowing with them (fig. 10)!

Physical strength is also a factor in our choice of wheelbarrows. We garden on a very steep slope, and I cannot push our metal wheelbarrow up the hill, even when it's empty. I can get to the top with an empty plastic one, but I have to use a tubtrug (fig. 11) to carry deadheads, weeds and grass clippings to the compost heap.

Tubtrugs, as with most plastic, become brittle over time – especially during severe winters, even stored in the shed – and the handles snap. Once this happens I re-use them, either as storage pots in my potting shed for spent compost, or as mini ponds. Fig. 12 is one such, with Bowles' golden sedge,



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Fig. 11 Tidying up *Geranium* x *oxonianum* f. *thurstonianum*

Carex elata 'Aurea' and a self-sown *Caltha palustris* from the main pond.

I store old compost bags in the shed, and use them over and over to take uncompostable garden waste to the dump. Since much of this waste is rose prunings and brambles the bags degrade pretty quickly, but when they do I use them to line hanging baskets or pots. We also use empty plastic sacks to

collect horse manure from our local livery stables to spread on our garden. We keep some just for this purpose, and they last a lot longer than the ones we use for garden waste.

I used to buy blood fish and bone, Epsom salts and powdered tomato feed in cardboard containers, but when kept in the shed over winter, condensation would wet the cardboard and spoil the contents.



Fig. 12 A tubtrug pond

I now buy these supplies in large plastic sacks to avoid this problem, and I reuse the sacks as described above.

To sum up: if you had asked me about plastic five years ago, I would have said we were very ecologically sound, re-using and re-purposing as many plastic products as possible until the end of their useful life,

before disposing of them. Now I have learned that despite my best efforts, all the bits of used-up plastic I finally put in my bin are sitting inert somewhere, eventually to break down into smaller and smaller pieces that may find their way into insects and animals and up the food chain, I am a lot less sanguine.

I am still formulating my views on plastic use, as more information becomes available. If suddenly all the plastic in the world vanished, along with the know-how of making it, I'm sure I would still manage in the garden, and so would everyone else. But since that is quite unlikely, in the meantime I am proceeding as follows: when considering the purchase of a plastic product, I will ask myself:

1. Do I need it?
2. What is the alternative? Is the alternative within my price range, and physical ability to work with it?
3. Will the alternative(s) make my gardening more arduous and less enjoyable, and how might this affect my mental and emotional health?

Based on the answers to these I should be able to decide whether plastic is the only viable option, and if it is I will give myself permission to use it in the garden in what I consider to be a responsible way for the planet, and not to beat myself up for doing so. 🌱

Sheila May started practical gardening in London, developing two different tiny gardens on London clay before moving to a chalk hillside overlooking the Avon valley near Christchurch in 2004. Her efforts to understand, tame, develop and enjoy a garden on this steep plot are shared with HPS members via her monthly blog on the HPS website *On a Chalk Hillside*.