

## Adding new pond plants

Most pond plants are just “plug and play” in that you can take them home and pop them on your planting shelves as long as you’re putting them in the same depth of water as you found them in here. If you’re changing the conditions they’re used to, you either need to do it gradually, or give them a bit of help while they’re adjusting to the new conditions.

Leaves are a different texture and colour depending on whether they are grown above (emerge) or below the water (submerge). If you move a plant during its growing phase, the plant may need to shed any leaves that have changed condition and re-grow leaves better suited to the new conditions. This means leaves that have grown out of water for CO<sub>2</sub>/O<sub>2</sub> exchange in the air can’t suddenly switch to being underwater just because you’ve plonked them on a deeper shelf: the plant would need to shed the emerge leaves and grow new submerge leaves that can respire and photosynthesise underwater. While it’s making these adjustments, just prune off any leaves that are starting to look yellow or brown and give it a few weeks to regenerate—it won’t disappoint you!

**BOG and MOISTURE LOVING PLANTS** can’t have their leaves submerged at all— you can put the pot in any depth of water as long as the roots are wet and the leaves stay dry.

**MARGINAL PLANTS** can often cope with having the bottom of their stems and lower leaves underwater, but NOT if they’ve already started their growing season with the leaves and stems above the water line. If your shelf is deeper than the pot you’ve bought, you have a choice of jacking up the pot on bricks etc. for the rest of this year so the plant can crack on with growing in the same conditions we’ve started it off in, or placing the pot lower and accepting that there will be a ‘sulking period’ while the plant sheds leaves and adjusts to the new semi-submerged position. This is also the case if you’re moving a plant from a submerged position to a higher shelf: leaves that were previously underwater will wither and drop off, and the plant will grow new leaves after week or so. Clever stuff!

**WATER LILIES** also need a bit of help adjusting to different water depths. The new underwater leaf growth is pointy and rolled-up until it reaches the surface, where it unrolls into the floating round “lily pad” we all know. Once it has opened up into a surface leaf, that leaf can’t survive underwater again, so when you buy a lily that has already grown some surface leaves you have two options when you get home:

1. Stand the pot on bricks or a shelf so the current lily pads float on the surface. This is the quickest route to a flowering lily as the plant doesn't have to do any adjusting and can carry on making leaves suitable for the depth of water it's used to until its ready to send up flower buds.
2. Place it in deeper water but chop off any open leaves, just leaving the rolled up new growth, which will continue to grow to the surface and open up. This lets you position the lily exactly where you want it but might set your flowers back a month while the lily gets used to the new water depth.

Beware: you often hear advice to “start your lily in shallow water and slowly lower it over several weeks until it’s where you want it” - this is technically correct and would work, but any surface leaves that you submerge will rot off, so this is a slow and messy way of doing it. Make sure you remove any rotting leaves before they decompose.



Got questions? Talk to us!



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## Re-potting pond plants

Pond plants do need re-potting periodically. It is important to top up the nutrients in the compost, and trim away some of the tangle of older roots to stimulate fresh growth. Just like other potted plants, pond plants can become 'pot bound' where the roots run out of exploring space and end up so densely packed that they rot. This is obviously no good for the plant, but also bad news for the water quality. If the plant stops growing, it stops doing whatever it was doing to help your pond and ecosystem, whether that's shading the surface from the sun, adding oxygen, competing with algae or feeding/sheltering wildlife. Worse than that, if parts of it are decomposing, they are using up precious oxygen and releasing toxic ammonia and nitrite into the water. Plants should ideally be re-potted at the beginning or end of the growing season, e.g. in March or October so as not to disturb them when they are in full swing making flowers and supporting wildlife.

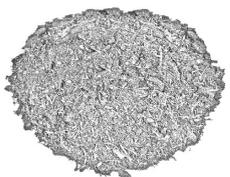
**POTS** come in different sizes and shapes. New plants often come in 9cm square 'transport pots' and these are very small to make the best use of space in the process of importing them to the UK. These small pots are useless for long-term plant growth, partly down to their size and partly down to the solid sides which don't allow any water movement or gas exchange. Roots of plants left in these will eventually rot.



Upgrade your new plants into a pot that gives it space to grow for its first season, ideally twice the size of the transport pot. It doesn't matter whether you go for round or square, just make sure they are the proper open-sided pond baskets.

**FABRIC POTS or PLANT SOCKS** are available and often chosen by people who want to limit the use of plastics and micro-plastics. They are a good alternative to the baskets, but don't normally last more than a season so you have to make sure you time re-potting the plant for when the sock is still holding together enough not to dump all the compost into the water! They are particularly useful for growing plants between rock crevices as you can gently squash the root ball between the rocks and create a pocket of compost to get the plant established. They should never be used with plants that have sharp tap roots as they do nothing to protect your pond liner and you'll end up with a leak!

**POND SOIL or AQUATIC COMPOST** is the specialist compost mix that is safe to add to a pond. Some types are a sandy loam texture and some are more fibrous, but none of them should have the sort of added fertiliser that would cause algae, and they definitely don't have the pesticides or fungicides that are found in some garden composts. They are also usually 'heavier' than normal composts with added grit to limit bits floating off.



**HESSIAN LINING** is not always necessary these days as the more modern plant baskets have smaller mesh, so the compost doesn't tend to leak out like it used to. By all means use it for peace of mind, and definitely use it if you're using the finer texture soil or open-weave baskets, or you'll find your pond water becomes very murky!

**GRAVEL** such as pea gravel is added on top of the compost to stop it floating away and discourage fish, birds and frogs from rummaging in the compost for insects.

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