October 2020



Cultivation special issue

We have always sought to share lessons learned regarding the cultivation of hostas, both through our newsletters and Frequently Asked Questions page on our website.

Feedback last month suggested we cover growing hostas in containers but rather than restrict the exploration, we review all aspects of cultivation linking back to previous newsletters and website pages, for more detail. We hope you find it useful...



Lessons learned

We have established that there are several key aspects to the successful cultivation of hostas and list them as follows:

Light levels

It is important that your hostas experience the full spectrum of light during the growing season. Even in the darkest shade, the full spectrum of light should reach your plant for best results. Therefore, they will never be as vibrant or characteristic when grown under cover, they can come close but any form of artificial cover will screen out some wavelengths.

Unfortunately, when growing hostas for sale, we do need to protect them from the worse of the weather but this is best achieved under a cover, which filters light rather than blocks it.

There is little doubt that full sun shining directly onto your hosta for long periods of the day will eventually result in bleaching and/or scorching but some cultivars cope better than others. Indeed, some cultivars have developed white undersides to cope with reflected heat in certain environments. Dappled shade is probably the best generic

Time to experiment

As we have already mentioned several times, Covid19 has resulted in us spending more time with our collection this year. As a result we are seeing things we haven't had the opportunity to witness in previous years.

These observations
occasionally contradict
some of our former
assumptions so we need to
return to some of the topics
we covered a while back in
our newsletters, to share new
findings and bring the
information up to date.

condition for the best colour and condition for your plants. Newsletter on light levels

Adequate moisture

Hosta do not like extremes of wet or dry as their root systems will either rot or dry out to the point when they can no longer absorb water or nutrient. The good news is that hostas are very resilient, coping with these extremes well. We cover this issue on our <u>FAQ page</u>.

Proper feeding

In our experience over feeding can damage your hosta or mask issues of growth, which can cause irreparable damage to the root system, and therefore the plant. We have probably erred on the side of being mean with feeding and there is no doubt some cultivars need it more than others. We have observed the effects of feeding certain varieties more than others and have updated our feeding regime to allow for subtle variations in requirements.

Reducing this detail into a generic feeding guideline is quite difficult so recognising signs of lack of nutrient is probably more useful. There are numerous hostas resources online and forums where people have submitted images, which help explain this better than words. In our experience one of the most common indications is a form of cellular bleaching, when the colour appears to be 'washed out'. However, there are some cultivars, such as <code>Hosta_'Neptune'</code>, where this effect appears to part of the plant's characteristics and is beautiful in that context.

Soil conditions

Hosta can grow in very hostile conditions with minimal soil. Having said that many modern cultivars, which have been grown through tissue culture, can be a little delicate until their root systems have matured. When you purchase your plant take a little while to look at the root system as this is the best indication as to how to proceed. All our mail order plants will reach you bare rooted and will have had a thorough health check. If the roots are fine, they would benefit from a light, open soil. Thicker roots prefer a denser soil mix.

We generally use the following elements to create our mixes, listed in order of amount used:

Dalefoot's sheep wool and bracken potting compost, recycled soil, coir, sterilised loam, washed horticultural grade sand and a slow release fertiliser such as Osmacote. If you are ground growing in heavy soil conditions then



Seasonal colour changes

Some varieties are viridescent, or have viridescent areas (see Hosta 'Fortunei Albopicta', above) to their leaves, which means they change colour to green. For some highly variegated cultivars, and many yellow/gold leaved cultivars, this is the only way they can survive. Conversely some cultivars develop their variegation or colour as the season progresses, turning whiter (albescent) or brighter (lutescent). Some varieties completely change both their centre and margin colours during the season, which is like having two plants in one. A question we are often asked is whether more sun or shade can assist with the retention/acceleration of variegation in their plants and, once again, it is very dependent on the nature of the environmental conditions and the characteristics of the cultivar in question. If this is something you wish to explore then we recommend you pop the plant into a container and spend a few of seasons moving it round your garden to establish where the plant responds best. We have found our plants can

respond very differently

according to the weather and

light levels. Up until recently

our Hosta 'Liberty' has seldom

developed the albescent

open it up with the addition of elements such as sand and grit to enable better drainage. Conversely in light soils the addition of well-rotted compost will enrich the soil and help retain moisture.

If all you have available is general multipurpose compost then you can use this but we would advise the addition of some soil from your garden to help neutralise the strength of the mix. Some multi-purpose compost mixes are very rich and, if it dries out, the nitrate levels can soar and potentially damage the roots.

Growing conditions

Space

This is perhaps the least well understood aspect of growing hostas and can be very important. We often say that hostas are like trees, what you expect to see above ground will be mirrored in the size of root system the plant will develop. We have found this general rule of thumb to be the best indication for root room.

If you are planting into a container it is important you consider the expected mature size of the plant to avoid it becoming pot bound too quickly. We have refined many of the plant sizes we have on our website over time. However, our default is to list the details of the registered varieties and estimated the mature dimensions of non-registered varieties based on their parentage, if known. Of course all plants will mature slightly differently according to where they are grown, so you should always use these dimensions as an approximation.

Many hostas will happily grow with their roots restricted for a period of time, but many won't, showing their lack of room through an untidy, congested habit. Often parts of the root system become so compacted that they die back, making room for satellite roots to flourish.

Miniaturising hosta

We recommend you ground grow the larger/giant varieties to let them reach their full potential. You can start them off in a container, but you will quickly find they will not mature as hoped for if the container is not large enough. On the flip side, you may not have space in your garden for some of these cultivars and would prefer to limit their growth. In this case go ahead but take a look at the plant each spring to see how the shoots emerge. If the shoots are touching each other you should consider dividing the plant to help keep it healthy and encourage an even growth habit.

Miniature and small varieties are possibly better off being

margins we would expect, but this year they were stunning. Even after all this time we can still be surprised by what the seasons can bring.

Recycling used soil

We used to recycle our spent soil in the gardens round the nursery but more recently we re-use it in our potting mix for our mature and parent plants. The used soil may be less nutrient rich but it is very good to help bulk up the soil and replicate ground growing conditions more closely. If our pre-used soil has been in the same pot for several seasons it

has developed its own microbiological conditions which help to augment the other ingredients we use. You can replicate this with your own garden soil.

Recent research has indicated that the amount of microorganisms contained within established soils are much more important to growth than were once thought, improving the soil structure and its fertility. Just think about how composting systems work and the answers are there.

Use of bleach

We use bleach in our hosta root wash water and to maintain tool hygiene, but this is not an exact science. A splash of bleach to a bucket of water is sufficient as a weak solution to wash the plant

'grown on' in containers before popping into the ground. If you are just looking for cultivars to grow in pots then once again we advise you check out their expected mature dimensions as a lot of miniature and small varieties have a surprising spread, especially the stoloniferous cultivars.

You will notice we haven't mentioned pests in this list, this is because most pest damage won't normally kill the plant, just make it look a mess. See our latest thoughts on the subject in our <u>April</u> 2020 newsletter.

The Hosta Year

Once again we need to be fairly generic with this information as no two years are the same. The weather greatly influences light levels, the clock by which most plants grow.

Spring: March through May

Hostas generally emerge as the soil warms up around April. Some years they may emerge earlier is the weather allows the soil to warm but the early shoots can sometimes suffer if we have a prolonged period of warm spring weather. If the shoots and early leaves are not sufficiently 'hardened' as they emerge because the nights are too warm then late frosts can scorch them. If this happens remove the damaged leaves to encourage the plant to produce fresh ones.

Some springs are cold and hot alternately, which can stop and start growth accordingly so don't be surprised if the weather holds back your plant and they emerge later than you would expect. Some varieties are like teenagers, very reluctant to get up! You can always gently feel the soil to detect if there are shoots just below the surface, waiting to emerge.

Propagation: we start propagating a few weeks after the shoots have emerged, preferring to wait until the leaves start to unfurl and the frosts have passed. Likewise for planting in the garden.

Dividing hostas is much easier using water. If your plant is very pot bound then stick the end of a hose into the pot and thoroughly wet the root ball, which should then slip out of the pot more easily. Jet water over the roots to remove as much soil as possible. This allows you to see what you are doing whilst making the root ball more pliable for dividing.

Propagation methods newsletter

Feeding: although we used to advocate two feeds a year to container grown plants and one to ground grown, we now feel you can feed more often without risking the plant's characteristics. Over feeding can distort the look of cultivars and make them all look quite similar in habit, rather like the plants you see at a garden

roots when dividing, or indeed sending out for mail order, as this can help target any pathogens, which may be inhibiting growth. We call it a 'spa treatment' as it help reinvigorate the plants and is a good idea for any plant that may be looking less vigorous.

Propagation methods newsletter



Container types

Most pots won't last as long
as the hostas in them!

Although plastic isn't ideal, it
is still one of the best
materials for long term use as
are resin pots. Beware of the
gradual deterioration that can
happen with plastics and
resins as the materials degrade

and become brittle.

Terracotta pots are the most attractive but they are porous so may need more water in times of drought. Metallic containers are good but avoid locating them where it will be hot as they will heat up and potentially damage the plants

centre. If you want your plants to look their best, don't be tempted to apply more feed. Once every 2-3 weeks is probably about right at this time of year.

Watering: Hostas need quite a bit of water during the spring, when they are emerging, but be careful not to overdo it whilst the frosts are still biting. Water from below if possible to avoid damaging the early shoots, just moisten the surface soil to encourage capillary action. We usually water once a week but ensure there is always moisture the plants can find through sinking their roots. If you are growing in containers then stand them in shallow trays and ensure the trays are full, so the plant can take all it needs.

Summer: June through August

As summer arrives many hostas lose their vibrancy as the leaves have already been producing sugars for a few months. This is the time of year to cut back any leaves which are already exhausted see the side column.

Flowers can be removed as they start to send up their scapes to redirect energy back into the roots and generation of more leaves but if you like the flowers remember to dead head to avoid them dying back onto the leaves below. Not only does this look a mess, it acts as a barrier to the light the plant needs to grow.

Propagation: we continue propagating when the weather is cooler. We tend not to propagate if the temperature rises above 30 degrees as we often experience higher humidity in the UK. Higher humidity and less air movement can encourage crown rot - see 'watering' below.

Feeding: reduce feeding to once a month until after flowering. The process of flowering uses a lot of the energy the plant has been manufacturing since they emerged in the spring, so make your last feed once the flowers have finished.

Watering: Although hostas will still need watering regularly during hotter periods, don't forget you want your plants to root deeply as this will build a stronger root system, and help them withstand prolonged dry periods. It is better to give your hostas a good drenching once a week then a little water daily. Water ground grown plants a distance from the crown to avoid any danger of crown rot at times of high temperatures and humidity.

Autumn: September through November

Towards the end of the hosta season the leaves will generally become less vibrant and many develop autumnal hues as they die back. Once the leaves have lost their colour they are no longer converting light to energy and so can be safely removed if they are looking tatty.

in them. One of the best advantages of metal pots is they deter snails.

You can be highly inventive with the containers you choose, just remember to add drainage holes. The photo above shows *Hosta* 'China Girl' in a coal scuttle to illustrate the use of metallic containers. The scuttle stands on a mirrored disc, which is less an artistic touch than a further deterrent to pests.

We covered container growing in more detail in our issue on hanging baskets.



Exhausted leaves

We feel the autumn colours can
be particularly lovely, if short
lived - see our Autumn Colour
newsletter for some lovely
examples.

This is the time of year we often get calls from customers worried about their plants looking ill. Although we are tempted to remind people it is autumn, there are other factors, which can cause the leaves to wilt and turn brown and papery and we always seek to rule these out before telling people they can stop worrying. Some cultivars, especially miniature varieties, are so exhausted they die back in the summer. Simply remove any leaves that look like they are doing this to encourage a second flush of leaves. This

Propagation: We usually stop propagating at the end of September to allow the plants to settle prior to dormancy. We have had our best results dividing plants 'in the green' and after flowering. If you wait until after the plant has flowered the sap is no longer rising and the risk of spreading disease is minimised.

Feeding: apply a last feed to any late flowering cultivars, especially the fragrant ones, which tend to flower later in the season.

Watering: ease off watering at this point in the year, just water sufficiently to maintain soil moisture.

Winter: December through February

There's nothing to see above ground during dormancy but rest assured the plant is still very active below the soil, converting all its energy into new shoots. Hostas like to be frozen for a period during the winter as it helps to reset the plant, so there is no need to over-winter your plants in a greenhouse. However, it might be an idea to move containers into a more sheltered spot to avoid frost damage to your pots - the plants should be fine.

Propagation: we choose not to propagate during winter months, allowing our plants to remain undisturbed during dormancy.

Feeding: there is no need to feed at all during dormancy.

Watering: Try to avoid extremes of wet or dry. If your plant is in a pot you can pop it in a sheltered spot and perhaps lean it to one side to avoid the crown getting waterlogged just below the soil's surface. Check the soil periodically and water sparingly if it is getting too dry.

Over-wintering your hostas Hosta hardiness

We hope this summary helps answer a lot of questions. Next month we reflect on 26 years of exhibiting.

Happy gardening Team Mickfield Hostas process has been called 'the
Chelsea chop' and is used
across many perennials to
encourage fresh growth.
Doing this in May is perhaps a
little early for some hostas, we
consider July optimum
as there is plenty of season
left for the plant to produce
fresh growth, which can often
be prettier than the first flush of
leaves.



To chop or not to chop Flowering takes a lot of energy from the plant, so we advise you remove the flowers for the first couple of season to enable your plant to mature more quickly. However, this piece of advice is becoming less popular as more people are purchasing cultivars based on flower colour. This delights us as it shows that people are willing to wait for the plants to develop at their own pace, bucking the trend for instant gardening. Whatever your decision, it is entirely your choice and, in our experience, certainly won't harm the plant.

Don't forget you can select cultivars based on flower colour on our search page.