South & South East

&

London in Bloom

November Bulletin

Little did any of us know as we entered 2020 with hope and promise for the year ahead, that all of our plans and lives would be so cruelly changed in such a short time.

We were all hopeful and confident that the virus which was affecting us would be over by the summer. It soon became clear that summer judging was in doubt. Rather than abandon the campaign, as we know some regions in the UK were forced to do, the Trustees of both SSEIB and London in Bloom decided for a desktop judging exercise. The response we received from you all was overwhelming.

Individuals, groups, and volunteers found comfort in continuing to maintain, as best you could, your community spaces and gardens. Others found enjoyment from passing or visiting these precious spaces as a release from their confinement. Local authorities and landowners continued, often with reduced workforces, to maintain their grounds for the benefit of their community, knowing that later in the year we would all need something to lift our spirits.

However, what happened was more profound. From the stories you told us, community members began to look out for each other in ways that perhaps they had not done so before. Keeping an eye on those living alone, those who were elderly or vulnerable, and conducting errands, assisting with shopping and vegetable boxes, and finding activities to keep young people and children involved. Over recent years 'Bloom' has focussed more and more on 'Community'. 2020 showed how important that has been, and that we have become a better place for it.

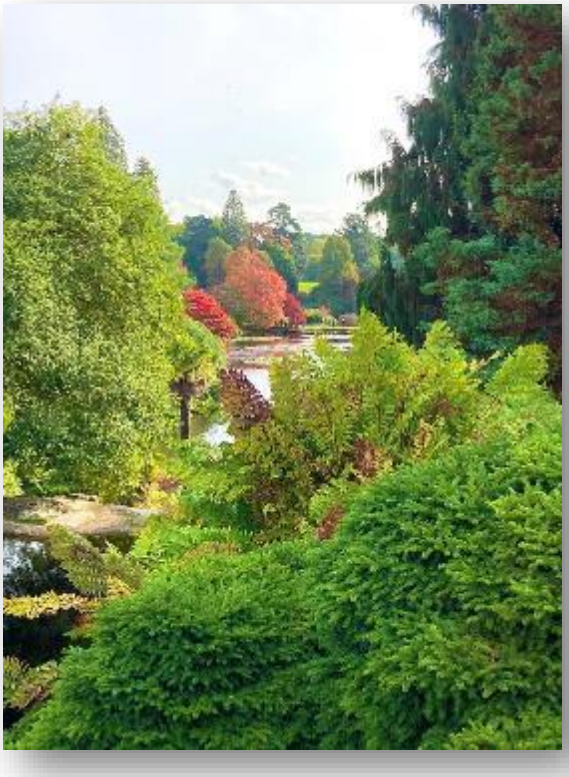
So, what for 2021? We know from the feedback we have received, that so many of you wish to continue with the work you are doing. We feel strongly that our campaigns should go ahead just as they did this year. We have decided to cancel the spring seminars, however, we will present these through an online tool to prove details of how to enter. Our series of newsletters we hope has provided welcome advice and tips, and we will continue to provide details of the 2021 competitions in forthcoming editions.

We very much hope that we can conduct some sort of judging, as we know how much so many of you value and appreciate meeting the judges in person. However, we are preparing several options to deal with circumstances as they arise, and at the very least we will fall back to a desktop role judging that we conducted this year if needed. We will make this simpler so that you can download documents to us online.

Please remember to record all of the work you continue to do even during this second period of lockdown. Please take photographs and document your stories to share with us and with others to show what you have been achieving, and equally for the benefit of those who are not able to get out and enjoy the green spaces in person.

We have been so heartened by the work that you have been doing and the spirit in which you are achieving this, which is appreciated by so many. Thank you. Please keep up the good work; stay safe and well, and we look forward to seeing you in 2021.

Mark Wasilewski – Co-Chairman of London in Bloom, Peter Holman Chairman South & South East in Bloom



The Joys of Autumn & Gardens.

Amidst this most difficult of year's its worth remembering that we live in a wonderful part of the world and even in Lockdown 2 we all able to enjoy our Green Spaces, public parks, and many of our great regional gardens.

Plant of the Month

Callicarpa bodinieri var. *giraldii* 'Profusion'

Known as the Beautyberry, **Callicarpa** comes into its own in autumn, bearing dense clusters of small, jewel-like, purple-blue berries, against bare stems. Its dark green foliage also puts on a good show in autumn, turning golden and red before falling.

Callicarpa 'Profusion' is a great improvement, fruiting well on its own, with large, packed clusters of the berries in mid-autumn, overlapping with the golden purple leaf tints and then lingering after leaf-fall. The young foliage is bronze-purple, and makes good material for vases, as do bare branches laden with berries. The Royal Horticultural Society has given it its prestigious Award of Garden Merit (AGM).

Grow *Callicarpa* 'Profusion' in moist but well-drained soil in full sun or dappled shade, ideally near a path or in a front garden where you can appreciate its autumn beauty. Plants tolerate a little lime in the soil, but conditions which are too alkaline will cause leaf yellowing.

GARDENING TIPS & TASKS
FOR NOVEMBER & DECEMBER

Reg Leach, SSEiB Judge and former Parks Manager.

Welcome to the combined November & December gardening column. This month I have set out Gardening Tips for both November and December as we move from routine work to winter projects.

In December I will then give January tips so you received them before the month's start and I'll continue on this way, which I hope will help you to plan your work in the garden.

Just like us, the garden wants to go into hibernation as the weather gets colder, but there are several things to do first.

Winter/Spring bedding:

It's still not too late to plant winter bedding. Choose between Wallflowers. Bellis, Myosotis, Primula, Viola, and Winter Pansies. Don't forget that if you are including bulbs such as Tulips amongst your bedding, put the bulbs in after the plants to avoid them being chopped in half with the trowel! Plant bulbs to a depth of 2 ½ times their diameter.

Principles of Pruning:

Before we get started, here are a few principles of pruning that will come in handy when pruning subjects such as shrubs and roses.

1. Remove dead and diseased wood.
2. Remove any crossing over branches as they will rub and may become infected.
3. Open up the centre to allow in more light into the middle.
4. Prune to an outward-facing bud.
5. Avoid leaving 'snags' - wood above a leaf joint as they may become diseased.
6. Try to retain the natural shape of a shrub whilst pruning.
7. As a general guide prune flowering shrub soon after flowering, so the plant has the longest time to produce new flowering stems for the following year.

Beds and Borders:

Prune back summer flowering shrubs before the weather gets too cold.

When you have completed all your border work, which may have included planting pockets of spring-flowering bulbs in any open areas of the border, carefully and lightly fork the bed over, to relieve compaction and give a mulch of organic matter to keep weeds at bay and for the winter rains to wash nutrient into the soil from the organic matter.

Now is a good time to assess how successful or otherwise your planting scheme has been and whether some plants need to go to make room for more appropriate ones for next year.

Herbaceous Plants:

Remove stakes and supports from herbaceous and perennial plants. Cut down the old growth to ground level, unless there are seed heads beneficial to birds. If you have mature plants you can lift and divide them to increase your stock, to fill in gaps elsewhere in the garden, give to friends and neighbours or create a new border or project using your surplus plants. To divide the rootball, dig it out and carefully insert two forks back-to-back through the middle of the rootball and slowly prise the two halves apart. Replanting them to the same original depth.

Roses:

Reduce HTs by half their height to reduce wind rock. (The final prune will be done next March). For climbers, prune back this year's growth to 2 or 3 buds of the mainframe. Apply this type of pruning to most climbing plants to maintain their shape. If you want to increase the climber's framework, tie in some of the new shoots into the spaces you want to fill.

For specie roses - take out some of the older shoots at ground level, leaving the newer stems to flower next year and encourage new growth from the base.

AUTUMN/WINTER PROJECTS:

Planting:

November to March is the best time to plant bare-root trees, shrubs, roses and hedging plants. Planting now allows the maximum amount of time for plants to settle in and to get their roots growing before next summer, giving them the best chance of surviving.

If you have plants growing in the wrong place and they are not too mature, consider lifting them now and replant them in a better position, Always water in well after any planting.

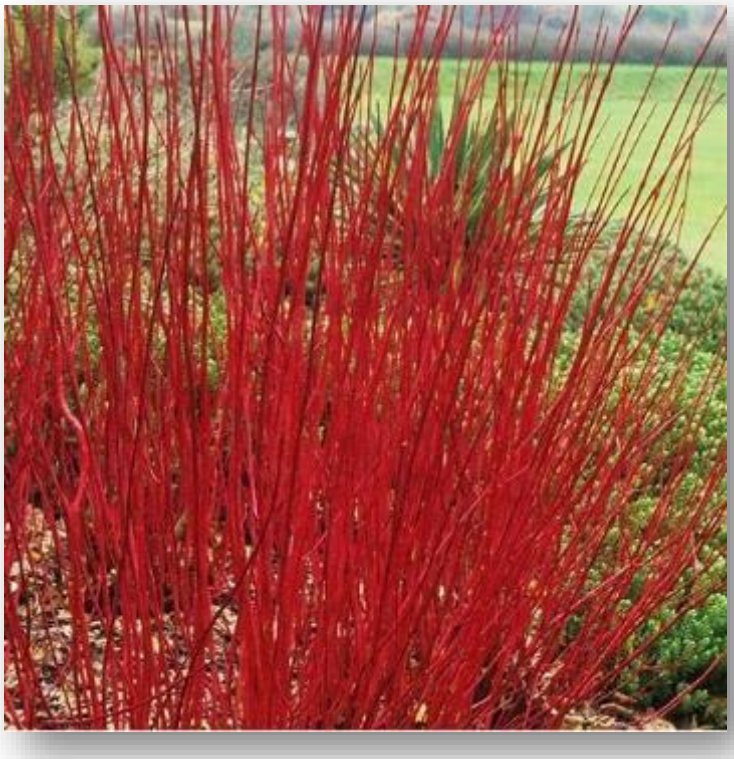
Trees:

When selecting a tree, try to visualise what size it will be in a few years, as often people select a tree that becomes too big for space. Also, consider the tree's eventual root spread and its proximity to buildings!

When planting, always prepare the ground well, incorporating fresh compost and a slow-release fertilizer.

Tree staking is a debatable subject. Some recommend a stake that supports the whole length of the stem. I prefer a much shorter stake that is only around two feet above the ground so that the tree can sway naturally in the wind and trigger root growth thereby giving better support to the tree as it matures. You may consider putting an irrigation tube in with the tree's rootball to assist water penetration to the roots, helpful in the tree's first year, but if you can water regularly you may not need to. Plant the tree to the same depth as when it was grown in the pot or nursery - note the existing soil mark on the stem. Planting too deep can rot the stem! Always spread the tree roots out evenly into the hole, putting the stake in first to avoid damaging the tree's roots. If containerised, loosen up the rootball carefully before placing in the hole. Add the soil and compost mix slowly, carefully raising and lowering the tree slightly by the stem, as you fill the hole, so the soil gets in between the roots. Start to firm the soil around the tree carefully with your foot, but only after the roots are covered with soil, then fill the remaining hole firming as you go and securing to the stake if used. I would suggest mulching around the tree base after planting to help keep it weed-free. If the tree is to be planted in a lawn, a mulched base will help prevent mower damage to the bark. Tree stakes usually face the prevailing wind to give the tree the best support, however when planting trees on roadsides put the stake on the side facing the road so the tree's trunk is protected from car doors!

Shrubs:



As with trees, always try to visualise the shrub's size in a few years and consider its position in the border. You don't want to end up with tall shrubs at the front of the border and smaller ones hidden at the back. Always prepare the ground well and incorporate new compost and a slow-release fertiliser. Some nurseries offer planting compost with fertiliser already incorporated. Depending on what you are trying to achieve, it's good to have a selection of plants in the garden that flower at different times of the year so there is always something of interest to see. Similarly, it is good to have a mix of shrubs that have a different leaf or stem colour, to give autumn interest. In the winter there is nothing better than a clump of red-stemmed Cornus siberica with the low winter sun shining on them!

Hedges:

Now is an ideal time to plant bare-root hedging plants. They are cheaper to buy as whips and they will usually outperform containerised hedging plants in a short time. Prepare a trench incorporating organic matter and if you have enough space plant a double staggered row to get a good thick hedge. I would recommend planting a native hedging mix of Beech, Purple Beech, Copper Beech, Field Maple, Hawthorn and perhaps Dog Rose, all of which will attract wildlife into your garden.

Evergreens:

November to March is the best time for planting evergreens and conifers (avoid Leylandii as they are too vigorous, and they will not please your neighbours!). As before plant to the existing soil level mark on the trunk.

Containerised Plants:

Containerised plants can be planted now and throughout the year. If you are intending to reuse an existing pot or container thoroughly disinfect it to remove vine weevils before replanting. Where possible, lift containers off the ground and onto legs to improve drainage through the winter and avoid waterlogging.

Lawns:

If it's not too wet, you may need to give your lawn its final cut. If your lawn has become compacted, spike, and scarify, to open up the soil and allow air into the roots. Use a springbok rake, (if you don't have a scarifier) to drag out the thatch. Collect the resulting thatch using a mower with a box, or thoroughly rake-off by hand. After scarifying, spike the lawn with a garden fork. Once completed top-dress with a fine loam, with seed, added if there are bare patches and brush in well.

However, if the lawn has extensive bare patches consider turfing these areas rather than seeding, particularly if the weather is cold, as seeds will not germinate so readily.

If you didn't do so last month, give your lawn a feed. Apply an autumn feed for root growth – not a summer feed, as that would stimulate top growth, which you don't want at this time of year.

When you have done the last mowing, clean and dry off your mower or arrange for it to be serviced and sharpened so it's ready for action next spring. If the winter is very mild, however, the lawn may need a cut – if so, avoid mowing after a frost, or if one is due.

Tender plants:

Some bulbous plants and those that have corms and tubers, such as Canna, Tuberous Begonias, Dahlias and Agapanthus can be left in their pots and allowed to dry off in the garage or shed over the winter, protecting them from the worst of the winter weather. Bring them out again next spring after the last frost and when new shoots appear at the base. If you have good draining soil you may want to risk leaving some of those temperate plants such as Agapanthus in the ground, but if you do mulch well over their crown. However, lifting, potting up and storing in the garage or shed, is less risky.

If you have tree ferns, tie up the fronds and add straw to the crown to protect from frost and snow. Straw can also be used to protect less hardy herbaceous plants too.

Greenhouse:

If you haven't already done so, now is a good time - if the greenhouse is empty - to thoroughly clean it using Jeyes Fluid (an old fashioned and dependable solution) or use smokes to fumigate the greenhouse to eradicate pests and diseases. Tender plants can then be put into the sterilised greenhouse, such as Pelargoniums, with perhaps a little heat but keep them as dry as possible to avoid rot. Ventilate in milder weather to keep the air fresh and circulating. Try insulating your greenhouse with bubble wrap for extra insulation and save on heating! Ventilate the greenhouse on fine sunny days but remember to close the vents at night!

Garden cleanliness:

To discourage slugs and snails keep paths regularly swept, remove debris from patios and decking and keep pots clean and free of dead leaves and detritus. At this time of year slugs and snails will hide in crevices and under rims of pots etc. Seek them and remove them – I'll leave you to decide what you do with them!

Herbs: if you have some less hardy herbs in the garden carefully lift and pot them up and bring them into your conservatory, greenhouse, or window ledge, to extend their life and give you fresh herbs for longer.

Don't forget:

- Keep collecting those leaves off the lawn, pond, borders, and low growing plants such as alpines and compost them.
- Pack away the hosepipe and lag the outside tap to protect from frost.
- If the winter weather is mild, keep hoeing to remove annual weeds such as chickweed, which seems to grow all year round. This is particularly the case in urban areas now that the winters are often milder.
- When planting roses avoid beds that have had roses in them before, as there is a risk of 'rose to replant disease'.
- Clean and sharpen mowers and hand tools over the winter period, ready for next year.

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Judging – Not Just Local - International Bloom judging

Following my five-year stint as a Britain in Bloom UK finalist judges (2001 – 2005) I was nominated to be one of two judges to be the UK's representatives on the Europe in Bloom (Entente Florale Jury/Judging Panel for 2006) - This was a great honour and I readily agreed, albeit not knowing what was involved or how it worked. At that time 12 countries participated a which included

Austria, Belgium, (Flemish & Walloon Regions), Czech Republic, France, Germany, Hungary, Republic of Ireland, Italy, Netherlands, Slovenia & Croatia and of course the United Kingdom.

Each participating Country entered a Town and a Village, and awards would be made in the Bronze, Silver & Gold grades, but there would be no overall winner, just the standard achieved. In 2006 our British entries were Cardiff and Usk.

Each participating country provided two judges. One judge from each nation would make up a judging tour, so this meant that 11 judges would descend on each entry with the home judge from that country acting as a guide for the visiting jury and sometime translator/ mentor for home entries helping them prepare their entries.

I attended a meeting in Brussels where I met my fellow jury members and where dates for visits were negotiated and each judging team assembled. Due to the readiness of each entry or the desire to be judged in a particular week or month, there was much debate (argument) and not so much Entente Cordiale as you might expect, as each nation tried to maximise their advantage. Finally, after many hours, dates and locations were finalised and three judging teams were assembled. (Some judges would judge in two tours and some all three). Those judging all three seemed to be treating the judging as a holiday.

At the start of each tour, the tour judges would all meet at an international airport with judges arriving through the day. Coaches were arranged for the journeys to each of the entries, this sometimes meant not arriving at the hotel until very late.

Each country's organising body and the lead judge were responsible for organising flights, airport arrivals, coach travel, any internal flights, and accommodation with most entries requiring at least a two-day visit sometimes even three, an arrival day, judging day and a departure day.

So, a bit of an administrative nightmare organising 11 judges, from different countries arriving at different times and sometimes at different airports, what fun!

Of course, there was also the language issues to contend with! English & French were the agreed languages, but the special arrangement had to be made for all to receive the same information in the best possible format at the same time, to ensure that each entries presentation and tour was fairly assessed, so interpreters were often required.

Very fortunately during my time, the team at the RHS managed the travel & accommodation arrangements all I had to do was mentor, meet & greet and guide (not judge) the jury members throughout their visits.

Oh, I forgot to say villages received up to 4 hours judging and large Towns and Cities up to 7 hours. This, of course, included events to encourage the judges to see the entry in a good light. Riverboat rides, air

balloons trips, cycling tours (Netherlands) visiting mountain tops and of course, gourmet eating often in 2 & 3 * Michelin restaurants. Visiting and sampling the entries wines were also included. What a chore! All this in the name of a professional assessment, of course. For some reason visits Churches and Cathedrals were almost obligatory but I could never see where a visit belonged on the marking sheet.

In my case, I was selected to judge Keil & Brokeloh (Germany), Kortrijk & Soheir, (Belgium) Beaune & Eguisheim (France) and Zwolle & Wijhe in the Netherlands.

Little did I know what to expect!

The Itinerary was set, I was to fly to the Netherlands for judging 4th & 5th July (Zwolle Town & Wijhe, Village) followed by coach travel (executive class) to Kortrijk, Town & Soheir Village in Belgium, 6th & 7th then on to Keil & Brokeloh Germany, on the 7th, 8th & 9th then to Eguisheim, Alsace and finally to Beane. 10th, 11th & 12th The Kiel to Eguisheim trip by coach was 900 km & 9 hours, heaven!

Each entry puts on a bit of a do for the judges. Bands, Choirs, full national costume (not the judges) fine dining, best hotels, flowing beer and fine vintage wines and gifts for the judges at each judging too!

At Eguisheim we even had lunch amongst the vines to hear of the viniculture - Classic charcuterie, local cheeses, and wonderful white wines (Alsace), Wine lover's heaven but with a risk of a squiffy judge or two in the afternoon.

Each judge scored independently and at the end of the tour, all judges were flown to a meeting held in Budapest, Hungary where the Tourist Board hosted the meeting with lunch and site seeing. At a long meeting, judges would agree on the outcome for each entry. 24 judges in a room (judges from other tours were flown in for the final meeting) with each trying to influence the results in support of their entries was quite an eye-opener, and not at all what I expected.

So much for Entente Cordiale. The Chairman tried to keep things in order, and because the assembled judges all had to catch flights home, an agreement was finally reached. In that first year, we gave Gold awards to Cardiff and a Silver to Usk both of which were well deserved. After that first encounter, I decided that Entente Cordial was not quite what I expected, and I decided to withdraw from the jury. I returned in 2012 and for the next few years, I became the UK lead judge and International Jury Vice-Chairman and was able to mentor our UK entries helping them achieve well-earned success. I am pleased to say that during that time UK entries achieved the highest standards, all well deserved.

2012, Gold -Rustington, Gold -Bristol; 2013 Gold - Birmingham, 2014; Edinburgh & Bournemouth Gold. 2015 Silver -Henley

Sadly, but understandably RHS Britain in Bloom felt that finding entries each year was becoming too difficult due to the high cost for entrants; withdrew from Entente Florale. But Bloom remains an international brand Villages, Towns & Cities across the Globe participating in efforts to improve their local environment and while there are different approaches and different criteria, the result is the same "Bloom" is an outstanding brand and wherever you are "Bloom" make a difference.

Peter Holman

Scientific research shows what many of us already knew?

Greener front gardens reduce stress

Including a few plants in a bare front garden could reduce your stress levels as much as 8 weekly mindfulness sessions, new research by the Royal Horticultural Society (RHS) and collaboration of Universities (Sheffield, Westminster, and Virginia) has shown.

Researchers have found that a greener front garden can also make you feel happier, more relaxed, and closer to nature.

The four-year scientific research project added ornamental plants to previously bare front gardens in economically deprived streets of Salford (Greater Manchester).

42 residents received: 1 tree (juniper or snowy Mespilus), 1 shrub (azalea), 1 climber (clematis), sub-shrubs (lavender, rosemary), bulbs (daffodils, crocuses, snowdrops) and bedding plants (Petunia, Viola) to fill 2 containers. The experimental design included a control group who received the plants one year later.

By measuring the residents' concentrations of cortisol hormone before and after the plants were added, the research team were able to see if the greenery had any impact on stress levels. Cortisol levels change across the day. In healthy diurnal patterns, levels peak in the early morning shortly after awakening and drop to the lowest concentration at night. Steeper daily declines indicate more effective regulation of circadian and hormonal mechanisms, which is a likely consequence of reduced stress.

Before the experiment, only 24% of residents had healthy cortisol patterns. Over the year following the plantings, this increased to 53% of residents having healthy cortisol patterns.

Perceived stress levels decreased by 6% after the introduction of the plants. Over half (52%) of the residents said their front garden helped them be happier, 40% said it helped them be more relaxed and over one in four (26%) said it helped them be closer to nature.

Dr Lauriane Suyin Chalmin-Pui, who researched as part of her PhD and who is now an RHS Wellbeing Fellow, said; "We can now further evidence the vital need to incorporate plants into our front gardens and domestic spaces. This will require a change in the way we strategise, design, plan and build our living spaces.

"The stress reduction data is startling; in that, we found such a significant response with just a relatively small number of plants. Now we know that access to even a tiny patch of nature has beneficial effects for our health.

“Re-greening our neighbourhoods is important. This data supplements other studies where we know garden plants help mitigate flooding, encourage biodiversity, reduce air pollution, as well as improve our health and wellbeing. We must reverse the trend to pave over our front gardens entirely, as it is possible to combine attractive, beneficial plantings with car parking space.

“Since I started this research, it’s been fascinating to see how adding plants to front gardens did have a transformative effect on residents’ lives. Residents suffering from loneliness and other mental health issues found it especially uplifting and motivational.

“One of the residents said that greening up the front gardens gave him pride not just of his house, but of the whole area. Another said that just looking at the colours of the plants made her feel brighter in herself.”

Professor Alistair Griffiths (RHS) added; “With so many millions more people gardening after discovering a passion to grow during the lockdown, the RHS hopes this research inspires more people to plant a few plants, from containers and window boxes to hedges and trees, in their street-side outside spaces.

“When we started this research four years ago and I first started thinking about it, the world was a quite different place. Today life is even more stressful for so many, meaning the results of this experiment are more important than ever. This research highlights the essential role of private gardens and the horticulture and landscape industry in delivering natural capital that improves the health of our nation. Together we should all try to make a positive difference one plant at a time.”

Dr Ross Cameron (University of Sheffield) finished; “This is an instrumental piece of research in that it ties in the very positive emotions people have with plants and gardens, with physiological health measures. It strengthens the evidence that gardening and ready access to green space are vital components in relieving stress and promoting positive mental health in our urban communities.”

Autumn in the Barbican Wildlife Garden

The Barbican Wildlife Garden, on the Barbican Estate in the heart of the City of London, is a pocket-sized space dedicated to the creation of wildlife habitats and promotion of biodiversity. All planting is focussed on providing food and shelter for local wildlife, with a range of habitats including a wildflower meadow, shrubbery, woodland, native species hedges and two ponds. To date, volunteers have identified more than 300 species of mammal, amphibians, birds, and invertebrates in the Garden.

Our wildflower meadow is one of the few urban examples of this habitat in a densely developed city centre. Originally an amenity lawn of tough ryegrasses created when the Garden was first laid out in the 1970s, it was gradually transformed into a wildflower meadow around 15 years ago when local community volunteers first became involved in tending the Garden. Over time, the predominant rye grass has been weakened and other grass varieties have been introduced. This evolution has had to take account of the garden's location and topography. It lies over the relatively poor topsoil which was originally used to in-fill the cellars and concrete foundations of the bombed-out buildings which still lie beneath the site. The soil varies in-depth and composition, retaining moisture in some of the shadier areas but can dry out rapidly in periods of low rainfall. From late October to mid-February, the entire Garden is shaded by the surrounding buildings.

With autumn now well and truly with us, one of the big events in the Garden is cutting the meadow which is done for us by The Conservation Volunteers (TCV) using lightweight Austrian scythes. The decision was taken this year to leave it until early October, a little later than in previous years, as we see bees and other insects foraging later and later each year, while many plants are still releasing seeds well into autumn. Cutting back on an annual basis gives less dominant species a chance to compete with the more robust species in the meadow, thus improving the overall diversity of the Garden.

After cutting, the grass is raked into piles called "stooks" which are then left for a couple of weeks to ensure all their seeds have dropped before the cuttings are added to the Garden's compost. All green waste is recycled within the Garden and, once composted, will be re-used around the Garden next year. The meadow will now be left cut back and short until Spring, with new seed being sown later in October after the ground has been thoroughly raked to aid germination.

In an exciting new development, this year for the first time we have been able to bring in some hoofed animals to help break up the topsoil in the meadow after scything and clearing.

It was once common practice to graze animals on meadows after they were cut to aid with seeding and germination. As the photos show, while sheep and cattle proved a little challenging for our urban location, our City of London police horses were happy to oblige!

Over the years, the approach to managing the Meadow has evolved significantly. Initially, the concept was to create a conventional wildflower meadow largely consisting of resowing cornfield annuals, such as corncockle, cornflower, corn marigold and poppies, to create a "pictorial" meadow. We still incorporate some cornfield annuals in our sowing but following advice from the London Wildlife Trust and other conservation bodies we now sow a wider variety of wildflower species to provide more extensive foraging for birds and insects throughout the growing season.

This year the northeast quadrant was once again left un-scythed as it has been for several years now. This quadrant is the most sunny and well-drained of the Meadow, with sandy soil and the richest variety of wildflowers and grasses. It is being used to experiment with sowing new species to see what can thrive, given the soil conditions and the deep shade it experiences from late October through to early March. Ground preparation consists of selective cutting back by hand of the larger plants to ground level, clearing any remaining clumps of coarse grass and thorough raking to remove dead leaves.

The more shaded southeast and northwest quadrants, with their heavier and damper clay, support flowers such as wild carrot, campions, black horehound, and cow parsley that are typical of field margins and woodland edges. Here regular scything and raking along with selective removal of over-dominant species, like rye grass, nettles, dock, and bindweed, brings in more light in early Spring to allow the less-dominant plants a chance to gain a foothold.

Given the importance of wildflower meadows as habitats for a wide range of wildlife and their relative decline in recent years, it has become doubly important that we continue to nurture and protect this wonderful space that we are lucky enough to have right here in the heart of the Square Mile.

The wonder of nature on Ham Lands.

As autumn progresses, we have experienced some magnificent colours in the leaves and fruit, from brilliant reds to golden yellows. We have also enjoyed many wonderful blue skies and some amazing sunsets.

The rain has brought new life too. Some tiny flowers have been popping up, these include speedwell, shepherd's purse, and stitchwort. These are a precious food source for tiny pollinating insects at this time of year.

We have 46 different types of tree living on Ham Lands. The oldest trees will be the English oaks at a youthful 100 - 120 years old. The oldest oak in Richmond Park, to compare, is thought to be 750 - 800 years old. 43 of these tree types are deciduous, this means they shed all their leaves in the winter. The energy-containing green chlorophyll is broken down and the components are absorbed and moved to other parts of the tree. They become a food store for the winter months and a resource to use for making new flower and leaf buds ready for the next season. Leaf-shedding also gives those trees some protection from high winds and frosty weather. The 3 evergreen trees, holly, holm oak and yew shed their leaves slowly throughout the year.

So, what happens to all the shed leaves? What happens to the fallen twigs and the dead branches?

A part of that story is explained by the amazing world of fungi. We are still discovering what they do, how they live and how they interact. If you look carefully you will be able to spot them. Some are called saprotrophic. These are the fungi that are busy helping to recycle and break down wood and leafy matter and return nutrients to the soil or inside a tree.

Some are called mycorrhizal. These are quite remarkable because most of the time you do not know that they are there, but they have a critical symbiotic relationship with the trees and the plants they live close to. Most plants have a symbiotic relationship with a fungus. Tiny threads under the ground allow the plant or tree to swap carbohydrates from the plant with nutrients from the fungus. The fungus can also help provide the plant with water and can sometimes warn it if there is trouble brewing. We can see the fruiting bodies of these fungi popping up in October and November. This is when you can spot the fairy rings around some trees. Another type is called parasitic, they can break down weakened parts of trees and even the trees themselves.

Remarkably there will be hollow spaces inside trees where fungi will have broken down damaged wood and the tree will have put up a protective barrier to keep the healthy wood alive. These hollows will provide really important habitats for birds, small mammals, reptiles, and a huge array of invertebrates. But fungi are only part of the amazing story.

Critical in the transformation of the autumn leaves back into the soil are earthworms. There are 27 different types of worms in the UK. They don't have lungs or gills but breath through their skin. They have to live in damp humid places. They don't have eyes, just a few photosensitive cells along their backs so that they know if they are in the open and at risk of being eaten by a bird.

Worms are essentially a tube, they suck in decaying organic things like leaves, bodies of small creatures and fungal matter. You might spot a piece of leaf sticking out of a small hole in the ground that is being pulled down by a worm. With the help of the soil that was the things, the worms eat; the leaves get ground down with the result being a fine paste that is eventually excreted.

Some worms leave worm casts on the surface of the soil. Worm casts are 5 times richer in available nitrogen and 7 times richer in available phosphate. Each worm can produce 4-5kg of nutrient-rich casts in a year. Critically worms help aerate the soil, pulling air into the soil as they burrow and creating channels for water to penetrate. There can be several hundred worms living in a square meter of soil. So, the wiggly worms that you may find in your garden or under a log are critical to healthy soil and everything that grows in it.
Other invertebrates enjoy a chew too. Beetles, springtails and so much more will be giving a helping hand. But the critical workers are the fungi and the earthworms.

So, if you do have a garden, don't be too tidy. Leave piles of leaves and twigs. Let the fungi and the worms fertilise your soil and keep it healthy.

Articles & News.

Our monthly Newsletter/Bulletin provides an opportunity for groups or entries to have an item published. If you would like to contribute please let us have a copy (a page of A4) and two images (good quality please) by the beginning of each month and we will publish by the middle (ish) of that month.

This is an opportunity to let other "Bloomers" know what is happening in your patch and give recognition to your supporters and volunteers.

Test you Gardening Knowledge

1. Which flower's name comes from the Ancient Greek word for star?
2. What common name was dianthus barbatus given to honour the Duke of Cumberland's victory at the Battle of Culloden? And, in contrast, what name do the Scots sometimes call the noxious weed ragwort also in memory of the infamous Duke? (Two answers required)
3. Which plant, widespread in Britain, if touched causes a serious chemical reaction which makes skin hypersensitive to ultraviolet light?
4. What is the common name for *Salix babylonica*?
5. Which flower is also the goddess of the rainbow in Greek Mythology?
6. Most species of eucalyptus are native to which country?
7. True or false. Ericaceous plants like acid soil?
8. Who designed the *Blue Peter* Garden in 1974?
9. The Avenue of the Baobabs is a group of famous trees in which African country?
10. Which garden in the Cotswolds is notable for its miles of sculptured hedges?
11. True or false. Tulips were once so valuable in Holland that their bulbs were worth more than gold?
12. Which king created the Hanging Gardens of Babylon?
13. Who is the patron saint of gardeners, horticulture, florists, brides, and brewers?
14. Which fruit has main varieties slicing, burpless, and pickling?
15. What is pomology the study of?
16. What fruit comes in varieties Oro Blanco, Ruby Red, Thompson, and Pink?
17. Which famous 30-acre sculpture garden, created by Charles Jencks, is near Dumfries in Scotland?
18. What is the national fruit of India, Pakistan, and the Philippines?
19. Apples, pears, plums, apricots, and peaches are members of what family of flowering plants?
20. What was brought to Britain from Germany by Sir Charles Isham in 1847?
21. True or false. Daffodil bulbs can be used in place of onions in many recipes?
22. Which flowers were once known as gillyflowers?
23. Who was the presenter of *Gardeners' World* from 1969 to 1976?
24. What name is given to the Japanese art of flower arranging?
25. Helianthus is another name for which flower?
26. Which television presenter and gardener owns a garden in Herefordshire called Longmeadow?
27. Often used in salads, what has the botanical name *nasturtium officinale*?
28. Vanilla flavouring is derived from which flower?
29. What has varieties beefsteak, plum and cherry?
30. Which tree was traditionally planted in graveyards and is associated with eternity?

Answers in the Christmas edition.