
G club
The G Club magazine from greenwood
JULY 2024
PLANTING INSPIRATION
Monochromatic gardens
Planting for exposed sites
PLANT FOCUS
Trees for urban areas
Heuchera & Geranium
Understanding SuDS
NURSERY FOCUS
Potting at Greenwood

G cycle

At Greenwood Plants we care about sustainability.

Greenwood's aim is to provide an effortless experience for our clients. G Cycle is our innovative packaging recycling scheme, for increased sustainability and convenience.

We offer free collection and a full reimbursement of packaging costs on wooden crates and plastic pots.

G Cycle helps you save time and money whilst contributing to your joint sustainability goals.

Learn more by visiting our dedicated web-page: greenwoodplants.co.uk/g-cycle/

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G club 2024 is better than ever

We're pleased to announce that in 2024, we're making G Club better than ever, with enhanced benefits, and greater rewards. Additions include Luxury event hospitality, charity of choice donation, case study collaboration, and more. To qualify for G Club benefits, all you need to do is remain within your payment terms each month of the quarter, and the level of benefits you will receive will increase in line with the value of your quarterly spend.

	G club GOLD TIER	G club SILVER TIER	G club BRONZE TIER
Credit bonus based on quarterly spend	3% Credit bonus	2% Credit bonus	1% Credit bonus
Complimentary delivery	all orders over £500	all orders over £750	all orders over £1000
Charity donation of your choice	£500 towards nominated charity	£250 towards nominated charity	£150 towards nominated charity
Fresh Acres HQ Tour	●	●	●
Greenwood Community Project Nomination	●	●	●
Case Study Collaboration	●	●	●
Complimentary copies of Greenwood Specification	●	●	●
Seasonal Hamper	●	●	●
Trip to Greenwood Holland (once a year)	●	×	×
Luxury Event Hospitality	●	×	×

Business Update

Greenwood Annual Trip to Greenwood Holland

In April, Greenwood embarked on its annual client trip to Greenwood Holland, to take a tour of the facility and the surrounding supplier nurseries. The group were accompanied by Managing Director Melanie Asker, Commercial Director Alastair Fairbairn, and Lead Client Support Manager Claire Durwick. The clients were shown the inner workings of our Dutch operation, including our efficient loading yard, and fields of Dutch trees, as well as overseeing practices such as tree grafting up close. At Greenwood, we recognise and reward client loyalty, and offering unique experiences like this is our way of giving back to our clients.

Greenwood ready to deliver first phase of National Highways project

In June, Greenwood hosted representatives from National Highways, with whom we acquired funding to grow 3 million native trees over 5 years last year. The visit consisted of a tour of our facilities, as well as an inspection of the trees grown for the first phase of the project, which is nearing completion. The project, worth £3 million, will provide British grown native trees in peat-free growing media for planting in community-backed projects across the country, providing the local areas with a boost to biodiversity, as well as enhancing green spaces for the local residents to enjoy. Sustainability is one of our core values, and contributing to projects such as this demonstrates our commitment to responsible planetary stewardship.

G Team Focus – Liam Spencer

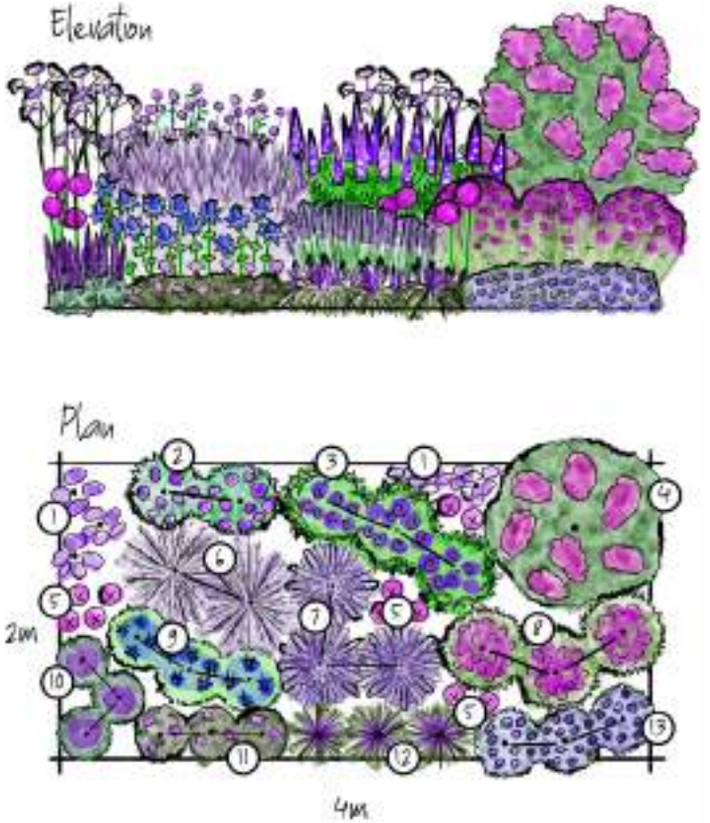
Liam joined Greenwood in May 2023, and is one of our Internal Sales Co-ordinators. On a day-to-day basis, he is responsible for expediting quotes and enquiries into orders, checking in regularly with clients to maintain and strengthen our relationships, and ensuring we're delivering an effortless experience to our clients, that meets both our expectations and theirs. Liam initially joined as an assistant to the sales team, and undertook a sales apprenticeship in tandem, which has helped him develop his professional skills, resulting in a promotion to his current role. We're extremely fortunate to have Liam on our team!

Greenwood acquire new 160-acre site

We are delighted to announce that in May, we officially signed the lease on a brand new growing site, Pigeon House Farm in Walberton, West Sussex. Greenwood were chosen as the preferred bidders after a lengthy bidding process, and have now begun setting up operations on the site. Located just a short distance from our Fresh Acres HQ, the new site will help to centralise much of our UK growing operation, allowing for more growing space, and enable the growth of British-grown native tree varieties. It will feature a brand new reservoir for water self-sufficiency, and a dedicated area for year-round potting. We're excited to see what the future holds for our new site.

Planting Inspiration: Monochromatic gardens

A monochromatic garden mixes shades of a single colour to create an aesthetically pleasing landscape with visual impact. No garden can be truly monochromatic, with many variations in intensity of a single colour and predominantly green foliage on most plants, however the mixture of hues and textures creates a landscape with visual interest. The emphasis in a monochromatic garden is not necessarily on a single hue but on many shades within that colour spectrum. By taking advantage of plants of different heights, shapes and structures, it is possible to create depth and movement in your planting scheme.



A monochromatic planting scheme offers a wide range of shades and tints within the same colour family. For example, pairing a pale light blue with a deeper, richer blue can create a beautiful contrast that enhances the overall aesthetic of the garden. These variations in tone add complexity and visual interest.

Single-colour gardens are at their best in enclosed spaces. An enclosed garden can accentuate the impact of colour, making the area appear larger and brighter, allowing your chosen colour scheme to take centre stage.

Monochromatic gardens can also make a positive contribution to biodiversity. Focussing on colours such Purple and blue, which are particularly appealing to bees and other pollinators, help to enrich the garden's ecosystem and contribute to the overall health of the environment.

Selecting plants for a monochromatic garden requires careful consideration to achieve a balanced design. Each chosen plant contributes its own unique hue and texture.

Verbena bonariensis **(1)** adds a vertical element to the garden with its slender stems topped with clusters of small purple flowers, which attract butterflies and pollinators. *Scabiosa* 'Butterfly Blue' **(2)** features alongside with its delicate lavender-blue flowers, while *Lupinus* 'The Governor' **(3)** adds depth with its tall spikes of rich indigo flowers, with splashes of white colour that provide some colour contrast. *Syringa vulgaris* 'Charles Joly' **(4)** is a classic lilac deciduous shrub with deep purple-red flowers that infuse the garden with a pleasant fragrance in late spring, adding height to the back of our plan. Along the lefthand side, *Allium* 'Purple Sensation' **(5)** adds unique character with its spherical purple flower heads held aloft on tall stems. Moving centrally, *Perovskia atriplicifolia* **(6)** presents silvery-blue foliage and airy spikes of blue flowers, adding character to the landscape. Alongside, *Lavandula angustifolia* **(7)**, also known as English lavender, produces fragrant purple-blue flowers and aromatic foliage, adding a sensory element to the garden. In front of the *Syringa*, we have *Erysimum* 'Bowles Mauve' **(8)**, which produces clusters of long-lasting purple-mauve flowers on upright stems from May-August. Towards the front, *Eryngium x zabelii* 'Big Blue' **(9)**, a herbaceous perennial, brings textural interest with its spiky steel-blue flower heads and metallic blue stems. *Salvia nemorosa* 'Caradonna' **(10)** borders the left side, with its spikes of purple-blue flowers atop dark stems, creating contrast in the garden background, whilst in front, *Scabiosa* 'Butterfly Blue' **(11)** adds movement and colour, attracting pollinators to the scheme. *Liriope muscari* **(12)** provides ground cover with its grass-like foliage and spikes of small purple-purple flowers, with *Campanula portenschlagiana* **(13)** completing the plan on the front fight side, helping to soften the border of the plan with its abundance of purple-blue bell-shaped flowers.

***Allium* 'Purple Sensation' and *Salvia nemosa* 'Caradonna'**

With careful planning and careful selection of plant species, a monochromatic garden can be designed to give colour to a green space, bringing fragrance and life to the garden itself.

***Erysimum* 'Bowles Mauve'**

***Eryngium x zabelii* 'Big Blue'**

Planting inspiration

Scan this QR code to view more planting inspirations on our website.

Trees for urban areas

The vital role of trees in city environments and selecting appropriately for your needs

In urban landscapes, surrounded by asphalt roads and concrete buildings, plants and trees are fundamental in promoting sustainable and healthy urban communities. Their importance has been confirmed by numerous studies that highlight the benefits that different tree species offer in reducing the challenges of a pollutant-filled urban environment. In 2020, air pollution removal services provided by nature led to an estimated 2,001 deaths being avoided and prevented 49,126 life years being lost, according to data from the UK Office for National Statistics (ONS) available on Office for National Statistics website.

One of the most crucial aspects of trees in urban areas is their ability to absorb carbon dioxide (CO_2) from the air and release oxygen. This exchange, which is a byproduct of photosynthesis, helps mitigate greenhouse gas levels in the atmosphere. It improves air quality, reduces air pollution and protecting public health. Additionally, through transpiration, trees release water vapour into the surrounding air, creating a natural cooling effect that helps mitigate high temperatures in dense urban areas.

Cities are not only habitats for humans, but also for a wide range of flora and fauna. Trees also provide shelter, food and nesting sites for a variety of plant and animal species, contributing to promoting urban biodiversity and creating more resilient ecosystems. These urban micro-habitats serve as sustenance points for local fauna, promoting biological diversity in urbanised areas. Developing green spaces in cities can also help mitigate the effects of natural disasters, such as floods and droughts, by absorbing and redistributing rainwater, stabilising soil and reducing erosion.

Despite their many benefits, trees face significant challenges when planted in urban areas, including air pollution, environmental degradation, disease and urban development pressures. However, there are solutions to protect and promote the health of urban trees, including sustainable urban planning, stormwater management and adopting tree care practices. Resilient urban planning is essential to ensure sufficient living space for trees to grow and survive, and for the local communities to benefit from them.

Acer campestre
'Elsrijk'

Prunus avium

In today's society, where sustainability and urban resilience are major talking points, trees in urban areas are vital in combating climate change and in promoting the health and well-being of urban communities. Trees play a fundamental role in the urban environment, offering numerous aesthetic, environmental and social benefits. However, the selection of trees for different urban areas requires careful evaluation of their characteristics and their impacts on the surrounding environment.

In parks and public areas, trees must be resilient and adaptable to withstand urban conditions. Species such as *Acer campestre* 'Elsrijk' or *Carpinus betulus* are suitably hardy, resistant choices. *Acer campestre* 'Elsrijk' is also tolerant to urban conditions, a moderately compact size, with non-invasive root system.

These trees offer large canopies that provide shade and shelter, promoting urban biodiversity. Additionally, they are tolerant to air pollution and stressful urban conditions, contributing to air quality and temperature mitigation. It is essential to select tree species suitable for the urban context, considering factors such as adaptability to environmental conditions, disease resistance and ease of maintenance.

When selecting trees in private gardens, it's important to consider size, maintenance and environmental impacts. Trees such as *Prunus avium* and *Malus* 'Evereste' add aesthetic interest, with vibrant blooms and decorative foliage. Like many ornamental fruit plants, *Malus* 'Evereste' can provide habitat and food for insects and wild birds. Incorporating this variety into your garden will not only add visual interest, but will also help support the local ecosystem.

When choosing trees for your garden, it is better to choose trees with a less invasive root system to avoid structural issues. Some species, such as weeping willow and poplar, have shallow, aggressive roots that can damage underground pipes and home foundations. Alternatively, trees such as cypress, with a vertical and minimally invasive root system, are preferred for their adaptability characteristics and lower impact on the surrounding infrastructure.

Street trees face unique challenges, including traffic pollution, limited space and interference with infrastructure. Roadside trees play a very important role in regulating the urban microclimate through a process called "evapotranspiration". The leaves release water vapour into the environment, lowering the air temperature by up to one degree (1.5 meters above the ground). This is more common in deciduous trees, which have wider leaf blades and are therefore more capable of carrying out this energy exchange. The trees to choose must be small or medium sized, with non-invasive roots and compact vertical growth. Species such as *Tilia cordata* 'Greenspire' and *Alnus glutinosa* are ideal options. *Tilia cordata* 'Greenspire' is a highly regarded choice for street trees, offering a number of benefits such as moderate size, compact growth and a wide canopy that make it ideal for this purpose. *Alnus glutinosa* can tolerate occasional flooding, making it an appropriate choice for areas with poor drainage or wet soils along roads. It may however require regular pruning, and consideration for its root spread to prevent disruption of overhead wires or underground pipes.

Selecting trees for urban areas requires careful consideration of the specific needs in each context. Opting for robust, adaptable and sustainable trees promotes a greener, healthier and more welcoming urban environment for residents and wildlife.

- Giulia Dattis
Creative Director

Plant Focus: Heuchera

***Heuchera* 'Plum Pudding' and *Heuchera* 'Lime Marmalade'**

Commonly known as coral bells, *Heuchera* is a semi-evergreen perennial that's grown for its fantastic foliage. Native to North America, *Heuchera* is part of the *Saxifragaceae* family of plants, alongside others including *Tiarella*, *Bergenia*, and *Astilbe*. Plants within this family are usually perennial and herbaceous. The majority of plants within the *Saxifragaceae* family grow in woodlands, with others found in mountainous locations.

> ***Fun fact:*** *The name Saxifraga means "rock breaker". This is associated with a number of species within this plant family, which are able to grow on exposed rock.*

Heuchera is a low maintenance planting option that grows up to around 50cm in height. It forms a compact mound and works well for containers, borders, or groundcover. It usually keeps its wavy edged or scalloped foliage all year round, which comes in a wide variety of colours, including various shades of green, purple, red, silver, and even black. Whilst the foliage of *Heuchera* is the main attraction, it also produces small flowers on tall, slender stems, which bloom in late spring to early summer; these are loved by bees and other pollinators.

There are several varieties of *Heuchera* that we at Greenwood recommend for your planting schemes. *Heuchera americana* is an evergreen, clump-forming perennial that grows up to 50cm. Its foliage are veined brown when they emerge, and change to dark green with coppery veins as it matures. On tall stems, tiny, brown-green flowers emerge in spring. *Heuchera* 'Caramel' is a vibrant variety with foliage which starts off in pale shades of red and orange, and turn caramel over time, with pale pink flowers emerging in summer. Ideal for planting in borders to create contrast with surrounding plants, and great for groundcover. *Heuchera* 'Key Lime Pie' stands out for its vibrant lime green foliage. Small white flowers bloom on tall stems from spring to summer. *Heuchera* 'Key Lime Pie' is perfect for adding a splash of colour to any landscape. *Heuchera* 'Lime Marmalade' forms a neat mound with ruffled, lime green leaves; it may retain some of its leaves during winter. *Heuchera* 'Lime Marmalade' also produces small white flowers in June, which rise above the foliage. *Heuchera micrantha* 'Palace Purple' has deep purple glossy leaves and pale pink flowers which bloom in early summer. It provides a striking contrast when combined with other plants because of the vibrant colouration of its foliage. *Heuchera* 'Plum Pudding' is a compact perennial that boasts plum purple veined leaves, with a dusting of silver-grey. This makes it an attractive variety of *Heuchera*, and is ideal for planting within a rock garden.

***Heuchera* 'Caramel'**

Heuchera is best planted in well-drained soil during the cooler seasons of spring or autumn—either after the final frost, or several weeks before the first expected frost date. These times of year offer the best conditions for successful establishment and growth because the cooler temperatures and increased moisture levels promote root growth, without the stress from high temperatures in summer. *Heuchera* prefers partial to full shade, so works with morning sun and afternoon shade; intense sunlight for long periods can burn the leaves and cause their vibrant colour to fade. Varieties with darker foliage can cope with more sun, as it can improve their leaf colour. To keep the plant looking its best and promote new growth, remove any dead or discoloured leaves. It is important to water *Heuchera* regularly and keep the soil consistently moist, but not waterlogged. To ensure that *Heuchera* stays healthy all year round, during winter, apply a layer of mulch over the plant. This helps to protect its roots from freezing temperatures and prevents potential damage to the plant.

Heuchera is predominantly healthy and low maintenance, but can be susceptible to various pests and diseases, such as vine weevil, *heuchera* rust, and leaf scorch. Vine weevils are small beetles which can harm the plant by feeding on its leaves and roots. Their larvae feed on the plant's roots, causing permanent damage and potential death of the plant. If only part of the plant has been affected, the wounds can be disinfected with copper, or biological nematode treatments, such as Nemasys. *Heuchera* rust is a fungal disease that affects the *Heuchera* genus; it causes orange or rust coloured spots on the foliage. This is more likely to occur when the plant's leaves remain wet for extended periods, especially in humid conditions. To minimize the risk of *Heuchera* rust, it is important to plant *heuchera* in well-drained soil with good air circulation. Leaf scorch is where the edge of the plant's leaves become brown and dry due to water stress or other environmental factors. To prevent this, make sure to regularly water the plant at its roots, whilst avoiding overwatering, to ensure the soil doesn't become waterlogged. Mulching can help retain moisture, as well as providing shade during hot periods. The pruning of dead or damaged leaves is also essential to help avoid leaf scorch.

- Lara Matthams
Content Marketing Executive

***Heuchera* 'Palace Purple'**

Understanding SuDS

The issue of rainwater and flood management is prevalent in most urban areas around the world. As societies build roads, buildings, pavements, and other spaces with hard impermeable materials such as concrete, tarmac, and stone, thought must be given to the drainage of rainwater. If left unchecked, the buildup of excess rainfall can cause severe flooding, damaging infrastructure, polluting the water and causing widespread disruption.

While most urban planning has accommodated the drainage of precipitation via underground drains and sewers, a lot of the infrastructure developed for rainwater runoff was not built to facilitate the extensive development of urban areas, and the increase of unpredictable, more extreme weather patterns.

Upgrading and improving drainage systems to handle the increased burden can be a costly and logistically disruptive endeavour, however there are other solutions to the problem that can help to mitigate the flow of rainfall, and to help control and reduce the damage caused by urban flooding. Sustainable drainage systems, or SuDS for short, are rainwater management practices that not only help to manage storm runoff, but also provide green spaces to urban areas, helping to increasing biodiversity, and provide tranquil spaces for the local residents to enjoy.

Sustainable drainage systems (SuDS) are a new approach to managing surface water runoff in urban areas. The main idea is to mimic the way in which nature absorbs and moderates rainfall runoff, providing a mixture of both natural, and engineered solutions. Natural areas are actually very efficient in managing the flow of rainfall, being able to absorb and store moisture for long periods of time, before slowly releasing the excess water, which is largely down to permeable surfaces such as soil, as well as the absorbent nature of roots, and the slower speed at which rainfall moves through grassy areas in comparison to hard concrete or tarmac.

SuDS are becoming increasingly important solutions in urban areas for a number of reasons. There are four primary direct benefits to SuDS on their local infrastructure, environment and population.

Firstly, SuDS help with water flow moderation. With the climate crisis drastically shifting weather patterns, creating higher sea levels and increased rainfall, the current infrastructure in urban areas is struggling to cope. SuDS reduce the risk of flash floods in urban areas by slowing down the water flow. This allows drains to better deal with the flow of water, preventing them from becoming overwhelmed and overflowing. Urban rainfall is also often filled with pollutants from industrialisation and traffic. Not only this, but the drainage of water through unsanitary urban areas can cause further pollution of the water. By allowing the water to filtrate and drain through soil and the roots of plants, pollutants are naturally removed, and absorbed, effectively 'cleaning' the water before it is transported into rivers and other ecosystems, benefitting not only the health of humans, but of the local plant and wildlife. Sustainable Drainage Systems also help with habitat creation and biodiversity encouragement. They mostly employ soft landscaping and green infrastructure into their schemes, which provides habitats for wildlife to flourish, including shelter and nutrition. This helps to increase the biodiversity of an area, allowing not just animals, but plants to grow and flourish, even in urban spaces. Lastly, most SuDS are multifunctional, and provide a number of uses at once. This means that the planting and implementation of green spaces for the purpose of rainfall management can also provide tranquil gardens and visual appeal to urban areas, allowing local residents to enjoy the plants and the wildlife it attracts. Regardless of their water absorbing properties, planting greenery in urban areas has a large positive impact on the local society.

There are a number of different techniques and designs that fall into the category of SuDS, which may either be solely focussed on drainage, or have multiple purposes within the development.

A Rain garden is a shallow area of a development to which other hard surfaces such as paths or roads can drain. The garden is then filled with plants that are flood tolerant, and can thrive in waterlogged soils, as well as trees with strong water absorption properties. They serve as effective SuDS, being able to absorb up to 30% more water than a lawn (Source: RHS). A Rain garden can successfully cope with the rainfall from an equivalent surface area 5 times the size of the garden, meaning that for a 100m² area of a roof or hard surface, the Rain garden need only be 20m². Our suggestions include *Alnus glutinosa*, *Viburnum opulus* and *Prunus spinosa*.

SuDS Planters are a more purpose-built SuDS solution, which help to mitigate rainfall drainage, mainly from rooves, and are not too demanding on space within a development. They work by connecting to a roof gutter via a pipe, allowing rainfall to flow directly into the planter, rather than straight into the drain. The planter stores the water, and releases the rainfall slowly, alleviating the strain on sewers and drains in periods of heavy rainfall. Suitable plants for this purpose must be able to endure flooded soils, but also periods of drought throughout the year. Due to the makeup of the soil, acidic tolerance is also useful. Our planting suggestions are *Miscanthus sinesis*, *Carex comans* 'Frosted Curls' and *Cornus Alba*.

Green roofs are essentially rooftops that are covered in plant life, usually in the form of grasses or moss. Rain drains slower through the grass and soil layer than it does when landing straight on the hard roof surface, and can help to control the speed at which the rainwater flows into the gutters, and subsequently into the drainage system.

Filter strips are gently sloping areas of land which are covered in planted vegetation, which are able to serve a few functions. Not only do they help to absorb and slow down the flow of water, but they also have a 'filtration' effect on the water, absorbing pollutants and essentially cleaning the water as it passes through. Plants suitable for this type of system are able to thrive in fast draining soils, being tolerant to flooding, but also to periods of drought, particularly in the summer months. *Lavandula angustifolia*, *Rosmarinus officinalis* and *Euonymus fortunei* 'Dart's Blanket' are some suggestions for this purpose.

Swales are channels that are dug into the ground, and provide a natural conveyance of water-flow, usually away from a development, and usually into the next stage of the process, which can either be a detention basin, or a drain. They're effective ways of diverting waterflow, and are often very low-cost solutions. As well as helping to mitigate peak flow and overall water volume, swales are particularly effective at removing pollutants from the water, due to the absorption minerals and particles through the soil and vegetation. They're an affordable, low maintenance SuDS solution, which are still able to provide some green space to a development. Read more about swale planting on the next page.

A detention or retention basin is often the final destination of a swale, but can also be placed anywhere within a development as a long term overflow, or final destination of surface water run-off. The difference between the two is that a retention basin is often a permanent pool of water, such as a pond, which maintains water all year round, and is contributed to by rainfall and waterflow from a development, whereas a detention basin is an area of land that is often dry with the exception of periods of heavy rainfall.

- Chris Williams
Marketing Manager

SuDS planter

In depth: Designing swales in SuDS

Also known as swale drains, permaculture swales or bioswales, swales are broad, shallow and vegetated channels designed to promote sheet flow of water. Swales can collect, convey or store runoff, and allow infiltration where the soil conditions are appropriate. The robust plant matter acts to filter pollutants and particulate matter. Traditionally, a swale trench follows the contour of the land, with a berm (a raised mound on the downhill side created from the excavated soil). However, it is also possible to install a swale on flat ground. The sides are generally gentle slopes. Bioswales can be used in various ways, depending on the landscape conditions or project requirements, and planting them effectively depends on the habitats arising from their use.

Bioswales are becoming increasingly common features of residential, commercial and municipal drainage schemes. This is in part due to the drive for greater sustainability, since bioswales help to control erosion and also form excellent habitats for, among others, dwindling amphibian species such as toads and newts.

As well as being a low maintenance feature in urban drainage systems, bioswales are simple to build and reduce the need for dearer solutions such as kerbs, gratings or gullies. They are particularly suitable for treatment of runoff from small residential developments, parking areas and roads. From a planting perspective, swales create a rich, moist planting area, which can give landscapers the opportunity for a contrasting habitat for added visual interest. They can also double up on landscaping functionality, acting as privacy fences or windbreaks.

In dry weather, a bioswale will hold little or no water, but after a period of heavy rainfall, the swale trench captures water. Sediment and organic matter will be filtered by the grass and other plants. The berm, a soft mound of loosely piled, non-compacted soil, acts as a retaining wall. In this manner, bioswale drainage helps to reduce erosion.

Over time, the storage of moisture creates long-term food and water security for both plants and animals, helping to establish a permanent habitat and growing system. Any trees planted on the swale will work with the earthworks to open up the soil for more water and make the land drought proof, eliminating the need for irrigation.

The types of plants that you select for the area around a bioswale depend very much on how the swale is used for drainage, the overall landscape aesthetic and purpose, and the habitats created.

As a general rule, a permaculture swale requires plants that can withstand times of drought in addition to waterlogged conditions. For trees, we recommend *Betula utilis var. jacquemontii* 'Moonbeam', a lovely, smaller variety of Himalayan Birch whose peeling silver-white bark adds distinction all year round. Red maple, weeping willow, river birch and ash are all excellent choices, too.

Many grasses will work well in swales. A particularly attractive variety which will thrive in the changing conditions is *Miscanthus sinensis* 'Kleine Fontäne', with its arching, silky leaves and wonderful array of colours throughout the year, from red flowers in summer to autumnal yellow and glimmering silver. You could also try *Calamagrostis brachytricha* or *Deschampsia cespitosa*.

Rosa rugosa 'Roseraie de l'Hay' is a suitable flowering shrub to plant, with attractive autumn foliage and highly scented crimson flowers in summer and autumn. Other options include *Sambucus nigra* 'Black Beauty' and *Hydrangea arborescens* 'Annabelle'.

For perennial planting options, *Geranium* 'Rozanne' is an effective choice, with its spreading habit and its saucer-shaped violet flowers veined in purple. For contrasting colour, *Hemerocallis* 'Burning Daylight' is suitable, which boasts intensely coloured and fragranced trumpet-shaped flowers in cheering orange. *Rudbeckias*, *Irises* and *Euphorbias* are other great plants to use.

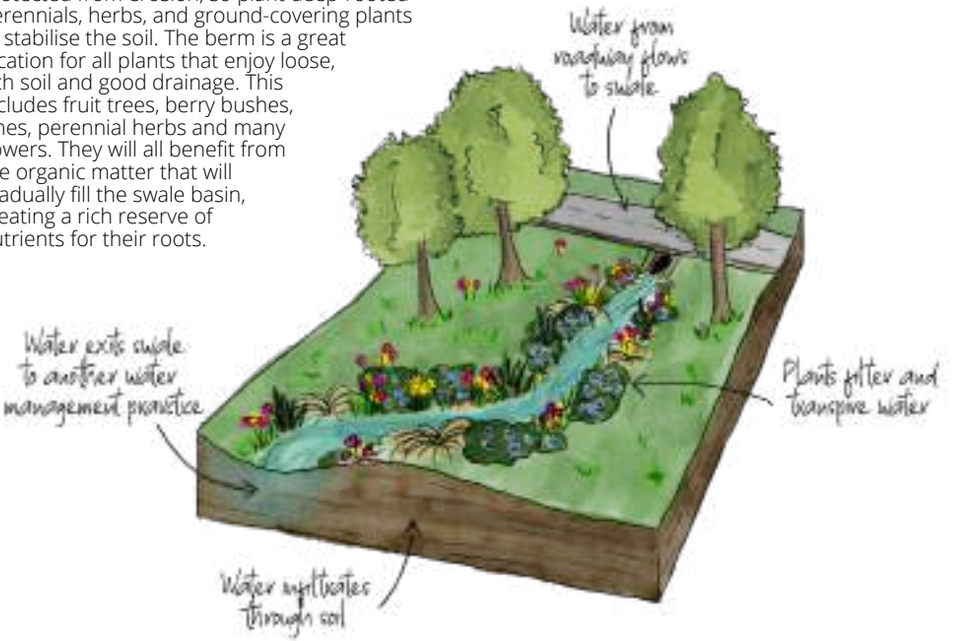
For the retaining wall (berm), it needs to maintain its structural integrity and be protected from erosion, so plant deep-rooted perennials, herbs, and ground-covering plants to stabilise the soil. The berm is a great location for all plants that enjoy loose, rich soil and good drainage. This includes fruit trees, berry bushes, vines, perennial herbs and many flowers. They will all benefit from the organic matter that will gradually fill the swale basin, creating a rich reserve of nutrients for their roots.

It is important to plant the berm as soon as the swale is ready (and level), to ward off any encroachment by unwanted plants. Unless it rains, water the plants after initial planting to help them become established.

Bioswales are an excellent place for planting multiple species in a small area. Aim to plant between six and 10 species, with two to three clumps per square metre. Ideally include a couple of year-old plants that have developed root systems. Avoid species such as Lavender and Azalea which cannot cope with 'wet feet'.

Once planted, spread a layer of mulch over the swale before seeding with a wildflower grassland mix. Left to their own devices, these plants will grow and encourage bees, butterflies and other insects, helping the habitat to become established.

Swales may require some light watering and weeding until the plants are fully established, and the berm may require further compacting soon after construction. Occasionally debris and sediment may need to be cleared or repairs made if erosion occurs.



Planting for exposed sites

There are always a number of considerations that need to be made when beginning to design a planting scheme. Among many others, one other major characteristic of a site, which must be considered before selecting plants and designing a scheme, is the site's shelter, or conversely, its exposure.

Exposed sites are defined as areas with little to no protection from wind, or from sunlight. This can be areas such as hillsides, including sites of high altitudes without surrounding valleys or hills to mitigate wind, or reduce hours of direct sunlight. Exposed sites can also include large expanses of flatland for similar reasons, lacking in natural barriers that are provided by undulation in the landscape. Other factors can also impact a site's exposure, such as the presence or absence of other natural barriers that provide a windbreak or shade, like forests or hedgerows, or even man-made barriers, such as buildings.

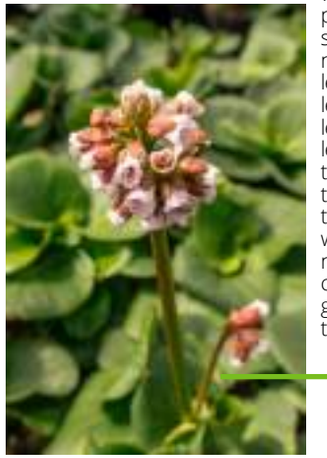
It's important to identify the extent of a site's exposure to wind and to sunlight at the early stages of designing, to ensure that the plants chosen are well suited to withstand the more extreme weather conditions, and that the green space is best equipped to survive long term.

***Brachyglottis* 'Sunshine'**

Extreme weather conditions, including wind and sunlight, can have varied but damaging effects on plants that are not suited to the climate. Most plants enjoy a gentle breeze, as it helps to ward off pests and diseases and provides ventilation in order for the plant to undergo its natural processes. Excessive wind however can have a number of negative effects on plants not equipped to deal with it. Strong winds can inflict quite severe physical damage to plants, tearing off flower heads, damaging foliage, and breaking stems and branches. This sort of physical force can cause trauma for plants, and may inhibit further growth, cause permanent damage, or make the plant more vulnerable to pests and diseases. Additionally, strong, persistent winds causes plants to close their leaf pores to reduce excessive water loss, it also removes the moisture from the soil. This limits the plants' ability to photosynthesise.

Whilst sunlight is important for plants to survive, too much sunlight can end up causing damage to varieties not suited to direct sunlight. If a plant has evolved to grow under the canopy of a wooded area for example, it will most likely struggle in an exposed planting where it suddenly receives sunlight for large amounts of the day. Excessive sunlight causes a buildup of energy in the plant cells, which can permanently damage the plant cells, causing wilting and scorching of the leaves. Furthermore, excess sunlight also means excess heat exposure, which can dry out leaves resulting in a turgor loss as the cells try to conserve the moisture contained within them, causing a loss of cellular structure and results in the plant wilting.

Fortunately, there are a number of plants with a general level of resilience, to wind, drought tolerance, and direct sun exposure. Appropriate plant choice is the first port of call for ensuring your green space will be able to survive long-term. For Wind tolerance, we suggest *Brachyglottis* 'Sunshine', *Ilex aquifolium*, *Taxus baccata*, *Elaeagnus x ebbingei* and *Euonymus japonicus* 'Jean Hugues'. In general, these plants can deal with the effects of extreme winds, and can often also be resistant to dry soils caused by wind. Typical characteristics of wind tolerant plants include smaller, narrower leaves, leathery/waxy leaves, hairy leaves, or thicker leaves that are able to store more water. This is not always the case, but it is a general rule of thumb.



Bergenia cordifolia

Cold tolerant plants are particularly hardy plants which are able to withstand sites which are particularly prone to cold temperatures in the winter, whilst being able to withstand a regular amount of breeze. The ability of each plant to withstand extreme temperatures is measured on a rating of 'hardiness'. This ranges from H1a to H7, with H7 being the highest level of hardiness. Cold tolerant options include *Potentilla fruticosa* 'Abbotswood' (H7), *Crataegus monogyna* (H7), *Cornus sanguinea* (H6), *Bergenia cordifolia* (H7), and *Geranium macrorrhizum* (H7). These plants will all survive temperatures of down to -20°C, requiring no mulching or protection in winter. They mostly all can tolerate sunlight too, making them perfect for exposed locations year-round.

Sun tolerant plants have evolved to withstand their environment and the weather conditions associated with their native ecosystem. Often, plants that are tolerant of full sun grow leaves which are specifically designed to withstand a constant flow of UV radiation. *Stachys byzantia*, *Festuca glauca*, *Perovskia* 'Blue Spire', *Stipa tenuissima*, and *Euonymus japonicus* 'Microphyllus' are all options which can cope with long periods of summer sunlight, whilst still being able to withstand most winter conditions.

Alongside choosing hardy plants that can withstand the extreme elements of exposed sites, there are several other ways in which the effects of wind, sun and cold can be mitigated.

Creating living windbreaks at the border of the planting scheme, with hardy, dense evergreen shrubs and hedges, such as *Ilex aquifolium, Lonicera nitidia*, or *Euonymous fortuneii*, will help to screen plants within the scheme. Regular pruning of these plants to encourage dense growth, will further aid its effectiveness. Regularly watering soil in prolonged periods without rainfall, even in winter, will help to avoid the wind from drying out the soil. Removing damaged stems/leaves, should the plant become damaged by particularly strong winds or sun, will help to reduce the risk of pests and diseases further attacking the plants. Lastly, planting hardy trees to provide shaded areas, will help limit the amount of direct sun exposure on your garden, allowing greater flexibility with plant choice.

Planting on exposed sites provides plenty of challenges for garden designers and landscapers alike. Despite this, it is possible to create a stunning and thriving green space for residents and wildlife to enjoy for years to come.

- Chris Williams
Marketing Manager

Planting for acidic soils

Understanding soil pH: a guide to optimal plant selection.

One of the most important aspects of determining whether a plant is likely to succeed is the soil in which it is planted. Soil, like clay or compost, is a type of growing media, otherwise known as a substrate. Before selecting plants for a garden, it's important to note that each plant has different requirements in terms of the soil in which it's planted, and that not all soils are the same. These differences stem not only from their structure, such as clayey, sandy, or rocky compositions, but also their chemical properties, which are influenced by the water that flows through them. This chemical variance can significantly impact the health and growth of plants.

Common names for plants can alter between The pH level of soil plays a crucial role in determining the availability of essential nutrients for plant growth. Within the soil, plants absorb all the necessary elements for their survival, including naturally occurring organic matter and nutrients supplied by fertilisers. These nutrients are absorbed by plants through the liquid fraction of the soil, known as "soil solution". The quantity of nutrients in the soil varies depending on the soil's pH level and the quality of the soil solution.

The primary cause of acidic soil is frequent rainfall, which leaches away soluble alkaline substances, including calcium, magnesium, sodium, and potassium, depleting the soil. Another reason for high acidity can be from the weathering of acidic rocks such as granite. Additionally, the decomposition of fallen leaves from certain plants, such as conifers, contributes to the acidity. Regardless of its origins, a substrate is deemed "acidic" when its soil solution contains a high concentration of hydrogen ions, measured by pH levels. A neutral soil typically registers around 7 on the pH scale, while acidic soils range between 7 and 3, with alkaline soils surpassing 7, sometimes reaching 10.

When we talk about acidic soils, we must make distinctions based on the specific pH value:

- pH between 5.1 and 5.5: highly acidic soil
- pH between 5.6 and 6: moderately acidic soil (sub-acid)
- pH between 6.1 and 6.5: slightly acidic soil
- pH between 6.6 and 7.3: neutral soil

In highly acidic soil, the overall microbial population decreases drastically. Slightly acidic soil tends to allow for bacterial growth without fungal presence. Extremely acidic soils contain elevated levels of aluminium, which negatively impacts plant metabolism, along with toxic heavy metals like zinc and cadmium, harmful to all living organisms. Sub-acidic soils, which are prevalent, offer hospitable conditions; they are soft, easily manageable, rich in humus, and boast plenty of nutrient availability.

pH 7.4 - 7.6	Alkaline
pH 6.6 - 7.3	Neutral
pH 6.1 - 6.5	Slighly acidic
pH 5.1 - 5.5	Sub-acid
pH 5.6 - 6	Highly acidic
pH 5.1 - 5.5	Highly acidic
pH 4.6 - 5	Highly acidic

To determine the soil acidity, there are two tools we can use: litmus test and pH meter. To check the pH level of the soil using the litmus test, collect multiple soil samples from various areas across the garden, before mixing to create a combined sample, which will then be sifted and placed in a glass container.

The mix needs to settle for approximately thirty minutes. Afterwards, litmus paper is dipped into the solution. By comparing the colour the paper becomes, you are then able to accurately determine the pH value of the soil under examination. The more acidic a substance is, the more vibrant shade of red the paper will go. similarly, if a substance is extremely alkaline, it'll turn a much brighter shade of blue.

A pH meter is an instrument that features a probe for directly measuring the soil's pH without the need for sampling. It is only necessary to make a small hole at least 10 cm deep on the soil to be analysed. You then fill the hole with distilled water, before inserting the pH meter probe into the hole. As with the litmus test, in order to achieve an accurate result, it is better to carry out measurements in several areas of the garden.

Once the soil's acidity level is determined, it's time to select suitable plants for the garden. Nearly all plants will thrive in neutral or sub-acidic soils, with the exception of those preferring alkaline conditions. Acidophilic plants are plants that thrive specifically in acidic soils.

There are a large variety of acidophilic plants, including numerous different species. For those plants, it's essential to ensure the soil is consistently moist, as well as acidic, particularly during warmer temperatures. To prevent soil stagnation, it's important to water sparingly but frequently. Most importantly, it's essential to always ensure acidophilic plants are in soil with a pH below 6 for their well-being.

In our G Range, we offer a variety of plants specially suited for acidic soil. Some examples include *Hedera hiberica*, *Bergenia* 'Silberlicht', *Cistus* 'Silver Pink', *Cotoneaster* × *suecicus* 'Coral Beauty', *Ilex crenata*, *Mahonia* × *media* 'Charity', *Pyracantha* 'Orange Glow', *Amelanchier lamarckii*, and *Sorbus aucuparia*.

While we suggest to keep the existing soil with its natural pH rather than attempting to alter it, there are a few ways to help neutrophilic or alkalophilic plants to grow in acidic or highly acidic soil. You can adjust the pH balance naturally by applying lime or limestone. These materials are organic and environmentally friendly. In spring, after a new check of the soil pH, if the value of pH is still too high, it can be enrich with another dose of lime before planting. It could be necessary to repeat this process every two to three years, or as needed, to maintain optimal soil conditions.

- Giulia Dattis
Creative Director

Plant Focus: Geranium

***Geranium macrorrhizum* 'Spessart'**

Geranium derives its name from the Greek term "*geranos*," which means "crane," in reference to the shape of its fruits which resemble the beak of a crane. Native to temperate regions of the world, including Europe, Asia and North America, geranium is prized for its hardiness and adaptability, characteristics that make it a popular choice in planting schemes worldwide.

Geraniums are herbaceous perennials that feature palmate, deeply lobed leaves, often with serrated edges, that range from bright green to silver-grey. Their flowers are generally five-petalled and offer a range of colours, including white, pink, red, blue and purple, creating a pleasant visual effect in gardens and landscapes. They flower in spring and summer, attracting pollinators such as bees and butterflies, positively contributing to the biodiversity of the local habitat.

Geraniums can thrive in a wide range of climate and soil conditions, making them ideal for gardens, borders, and as ground cover plants that help control soil erosion. Their ease of maintenance and ability to naturalise in different settings make them a practical and attractive choice for garden designers and landscape architects.

The *Geranium* genus includes a wide range of species, each with unique characteristics suitable for different landscape applications. Among the best-known species, *Geranium macrorrhizum*, also known as big root geranium, stands out for its robustness and ground-covering capacity. This perennial is appreciated for its aromatic, deeply lobed leaves, which in autumn are tinged with red and orange shades. Its bright pink or white flowers bloom in late spring, adding a pop of colour and attracting pollinators. *Geranium macrorrhizum*, with its rounded, light green leaves that transition to lovely autumn shades and saucer-shaped purple-pink flowers, is great for weed suppression and underplanting shrubs. Varieties such as 'Album' with pale pink flowers, 'Bevan's Variety' with magenta-pink blooms, 'Ingwersen's Variety' with soft pink petals, 'Spessart' with bronze-red autumn leaves, and 'White-Ness' with pure white flowers, all offer excellent ground cover, thrive in diverse light conditions, and are drought-tolerant.

***Geranium phaeum* 'Album'**

Did you know? *Geranium macrorrhizum, is not only appreciated for its beauty and resistance, but also for its ability to repel mosquitoes. The leaves of this geranium, when rubbed, release a scent intense which, in addition to being pleasant for humansacts as a repellent to insects. This makes it a perfect choice for residential outdoor areas where summer pests can be an issue.*

Another interesting species is *Geranium phaeum*, known as dusky crane's-bill, mourning widow or black widow. It produces dark-purple flowers, creating a charming contrast in a planting scheme. *Geranium pratense*, or meadow cranesbill, offers splendid blue flowers and adapts well to naturalistic meadows and flowering borders. Finally, *Geranium sanguineum*, also called bloody cranesbill or bloodred geranium, is famous for its bright red flowers and its ability to thrive in difficult conditions, such as poor, dry soil.

Geraniums are relatively simple to care for, preferring sunny or partially shaded locations with well-drained soil. When planting, be sure to place plants at an adequate distance from each other to allow good air circulation, thus reducing the risk of fungal diseases. Watering should be regular, but care must be taken to avoid water stagnation. Be sure to let the soil dry between one watering and another to prevent root rot. During the growing season, apply a balanced fertiliser every 4 to 6 weeks to support lush blooms.

Pruning geraniums after flowering helps keep the plant compact and stimulates new growth. Regularly removing faded flowers encourages the continuous production of new buds. To protect plants during the colder months, especially in areas with harsh winters, it is advisable to mulch the base of the plants or move them to a sheltered location. With this simple care, geraniums can thrive and add a pop of colour and vitality to your garden for many years.

Geranium sanguineum

Geraniums, despite their robustness, can be subject to various pests and diseases that can compromise their health and beauty. Among the most common fungal diseases are botrytis, which causes grey spots and rot on leaves and flowers, and geranium rust, characterised by orange pustules on the undersides of leaves. To prevent these diseases, ensure there is good air circulation around the plants and avoid overhead watering, which can leave the leaves wet.

Aphids, scale insects and whitefly are the most common pests that affect *Geraniums*. Aphids feed on plant sap, causing deformations and reducing the vitality of the plants. Scale insects form cottony colonies that weaken the plant, while whiteflies can cause yellowing and transmit viruses. To control these pests, you can use natural insecticides such as neem oil, or introduce natural predators, such as ladybugs. Be sure to regularly inspect the plants to identify any infestations early and keep the geraniums healthy and thriving.

- Giulia Dattis
Creative Director

greenwood Community

An update on our recent donations

Greenwood Community is our plant donation scheme, which involves collaborating with local schools, environmental groups, and charitable organisations, to donate a wide variety of different plants, shrubs, and trees. The aim is to help enhance green spaces, positively contributing to the biodiversity of the local ecosystem.

2024 has so far been a hive of activity for our community initiative, with 11 donations already having been made, and plenty more in the works for the rest of the year.

Frequent Greenwood Community collaborators, **Steyning For Trees**, collected 250 bare root whips, for various planting projects around the local area. The organisation was founded in 2019 to fight climate change, increase biodiversity, and support the wellbeing and beauty of the Steyning and Bramber area. The whips were divided amongst several landowners and conservations schemes, who have used them to help regenerate their woodland areas. Jo and George Gordon, who run the organisation, said "thanks so much to Greenwood for their generosity and support in helping us to plant more trees."

In early April, Greenwood donated 40 young willow plants to **Goring C of E Primary Schoo**l, to create a willow tunnel. The school's origins date back to as early as 1844, being in their current location from 1961. The school plans to create a willow tunnel, using the donated plants, which is done by weaving the growth of the willow plants around a frame. Gradually, as the plants begin to grow, the tunnel will take shape. Providing living infrastructure around the school grounds will provide many benefits to the children, not least giving them a space on the school grounds to enjoy during their breaks.

Our Ninth community donation of 2024 went to **St Wilfred's Hospice**, based in Bosham, Hampshire. St Wilfred's are dedicated to providing high quality specialist end of live care and bereavement support to local lives, and recently moved to a brand new facility in 2019 in order to further provide their services to more families. Greenwood donated a number of mixed native hedging plants to fill gaps in the hedgerows around the grounds, to provide wildlife corridors for wildlife.

Longtime Greenwood Community collaborators **Yapton Eco Group** recently collected a donation of 200 mixed native hedge bare root plants, to be planted on the border of the local George V Field, in an effort to re-wild the field's edges, enhancing the local biodiversity. Additionally, Cornus stolonifera 'Flaviramea', also known as 'Yellow Dogwood', was planted along the border of a grassy bank, and several donated willow whips were also planted on the borders the local play area. Mark Andrews, who runs the group, said "Yapton Parish and its eco group are delighted with the support we have received from Greenwood Nursery."

Recently, we donated 85 plants to **Camberley Manor Care Home**, to a regeneration project involving by our longstanding client, Graduate Landscapes. The project was conducted as part of a charity event, organised by construction firm, SKANSKA. The aim is restore the gardens of the care home, with plants chosen to provide the residents with a sensory garden. Patryk of Graduate Landscapes said "We're extremely grateful to Greenwood Plants for their generous donation of plants. The project was a resounding success and it was a pleasure to be able to contribute to a worthwhile cause"

If you know of a project that you'd like to nominate for a community donation, get in touch with us today.

greenwood Choice

Our trade sales centre is open for business, five days a week.

Come and browse our extensive selection of plants and sundries, ready to take away today. We stock a range of specimen shrubs, herbaceous perennials, topiary, grasses, and more.

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