Rewilding Menu

A guide to rewilding options to support biodiversity



The importance of rewilding

Our natural environment is currently facing a triple planetary crisis of climate change, pollution and biodiversity loss.

In September 2019, South Kesteven District Council formally declared a climate emergency, reflecting the urgent need to accelerate carbon emission reductions. To overcome the ongoing degradation of our environment, the importance of integrating green infrastructure into urban environments has been identified as a crucial element of nature recovery.

Rewilding involves the restoration of healthy ecosystems, aimed at increasing biodiversity and reversing the loss of our wildlife. By developing and protecting existing habitats, we can build towards a more resilient landscape that is better positioned to adapt to the effects of climate change.

Rewilding serves a dual purpose of reconnecting people with nature, at minimal cost. By altering our approach to the management of our open spaces, we can provide better habitats for wildlife, improve biodiversity, and increase amenity value. This is especially important as many people are spending a significant amount of time indoors where a busy, technology-mediated life leads to a disconnect with nature. The incorporation of green space within our environment can foster a deeper sense of connection to nature, reduce stress and promote healthier living. Encouraging people to spend more time moving in nature-focused environments can also help lessen the effects of mental and physical illness.

To align with biodiversity initiatives, specific pocket sites across the district could be maintained differently to attract a diverse range of beneficial species.

The creation of rewilding areas may be complemented by regularly mown sections and pathways, maintaining the visually appealing environment of South Kesteven whilst supporting local wildlife populations. By considering the environment, wildlife species and need of local people in individual locations, a tailored approach can be taken to ensure maximum benefit across the wider community. SKDC Officers will be happy to provide recommendations on the suitability of different rewilding measures and support in funding searches.

This guide has been developed by South Kesteven District Council to support town and parish councils in their endeavour to tackle local biodiversity loss and improve the health and wellbeing of residents.

It presents a menu of rewilding options with projected costings that may provide inspiration for new rewilding initiatives within the district. Ideal sites will be areas of open space with existing public access that are currently underutilised within residential areas, which are either town or parish council owned.

Projects carried out within areas of open grass that currently lack any interesting features will be especially beneficial to biodiversity net gain. It will be the responsibility of the town or parish council to identify areas of interest within the district and manage the organisational element of project work that is beyond the scope of volunteer capacity.

Pollinator-friendly	6
Beetle banks	8
Set asides	10
Swales and filter strips	10
Rain gardens	12
Hedgerow planting	14
Tree planting	16
Living walls	16
Bat boxes	17
Bird boxes	17
Bug hotels	18
Hedgehog houses	18
Community pond	19
Community garden	20
Dead hedges	21
Log piles	21
Signposting of rewilded areas	22
Additional features - benches	24

Establishment and maintenance

MEASURE

ESTABLISHMENT PERIOD

The best time to sow wildflower seeds is in the autumn. Ideally, the chosen location should be free from existing grass and weeds. To provide the best chance of wildflower establishment, the top 5-10cm of soil should be removed prior to sowing to reduce soil fertility. This will reduce competition from different grass species.

Wildflower meadow

To aid establishment, it is important to mow mixed meadow regularly in the first year after sowing, encouraging strong root growth. Six to eight weeks after the seedlings appear, cut to a height of 5cm. Repeat this every eight weeks throughout the first summer.

Ask people not to walk over the area dedicated to the wildflower meadow.

MAINTENANCE REQUIRED

As the meadow establishes, there are three main timings for cutting. These include a spring cut (no later than the end of April), the main summer cut (between late June and August end) and the autumn cut (between the end of August and late November).

One or more of these cuttings will help to establish a strong meadow. Cuts should be tailored to encourage the plants deemed most suitable for the plot and to help manage grass-dominant meadows. By the fourth year, a spectrum of colour can be expected as the diverse mix of perennials flower at different stages throughout the season.

The Royal Horticultural Society provides a useful **guide** for meadow maintenance.

MEASURE	ESTABLISHMENT PERIOD	MAINTENANCE REQUIRED
Beetle banks	 Beetle banks will take between two and three years to establish. In the first summer after sowing the seed, the bank should be cut several times to encourage the grasses to root and grow more thickly. It is important to protect the populations of insects and other wildlife that may be present. Do not cut the whole bank in one go. Check the bank before cutting. If there are signs of nesting birds, delay cutting until birds fledge. Do not let people walk over the bank as this can erode the ground, increase weeds and damage wildlife that has moved in. 	After the first year, it is best to leave beetle banks untouched and unmanaged. After two or three years, the habitat will be ideal for predatory insects and spiders. Once established, an effective beetle bank will have thick tussocky grasses, including dead stems from previous seasons. The bank should have few weeds and there should be an abundance of invertebrates present. To control the presence of weeds, it is possible to spot spray, carry out localised cutting of problem areas, dig out or pull any weeds by hand.
Tree planting	It is best to plant trees between November and March. Keep a one-metre diameter around the tree free of weeds and grass for the first few years – this will reduce competition for moisture and nutrients, increasing the trees' chance of survival. Trees will adapt to natural conditions so shouldn't need watering, especially as this will encourage roots to grow up towards the soil surface rather than down towards groundwater. If there is a particularly long dry spell and watering is necessary, saturate the ground to ensure water soaks deep into the soil.	In Year One to Three, ensure everyone involved in the maintenance of the area knows where the trees are to avoid accidental damage. Then, in Year Three to 10, ongoing maintenance of tree planting areas will involve removing tree guards as they start to split. Responsibly dispose of the plastic. Pruning can encourage trees to grow upwards rather than outwards once established. This can also help to create a diverse canopy structure. The Woodland Trust provides a useful website guide to tree care.
Hedgerow development	In the first spring after planting the whips, trim all lateral branches back by 50%. Prune damaged, diseased or dead wood after the first leaf break. To aid establishment, it is best to maintain a metre wide strip in weed free condition for a minimum of three years, reducing competition for moisture and nutrients from grass and weeds.	In the first five years of a hedge's development, annual cutting can help encourage a thicker hedge.

Pollinator-friendly

A wildflower meadow is a nature-friendly addition that can replace a lawn and change an open area into a visually appealing arrangement that also makes a difference to declining species.

To provide maximum benefit to local wildlife, a British wildflower mix targeted towards bees and pollinators is ideal. These vibrant mixes contain an assortment of annuals, perennials, and grasses to attract different species.

Perennial plants live for several years, whilst annuals flower in summer and die off once they have set seed. However, if left to allow them to scatter seed, new plants will grow and flower the following year. Other mixes can be tailored to support butterflies, moths or seed-eating birds. Seeds are best sown onto bare earth with the seeds hand broadcast at 2g per square metre. However, if sowing onto existing grass, only 1g per square metre is needed. It is important to choose a mix of wildflowers to suit the soil type at the intended location.

The price of 500g of seed can range from £40 to \pounds 157, depending on the representative mix. Preplanted trays and plug plants are also an option, though these vary in cost.





Wildflowers next to a cut verge at Keele Cemetery. Image: Newcastle-under-Lyme Borough Council Streetscene Services / Chris Hollingworth



Wildflower meadows are an excellent way of supporting pollinator species whilst creating a colourful landscape for all to enjoy.

Margins and pathways can be cut to provide a 'managed' look which is more appealing to the public. Pathways can also be fun for children to explore.

Beetle banks

Unknown to many, beetles play an important ecological role. The UK has more than 4,000 beetle species, many of which are predators, pollinators and decomposers.

Ladybirds can help limit aphid populations whilst water beetles keep mosquito larvae under control in ponds. Beetles also feed both the soil and larger visiting mammals, such as birds and hedgehogs.

Considering beetles don't tend to travel far when foraging, the best way to support beetle populations is by creating a specialised environment, known as a beetle bank.

Beetle banks are elongated, permanent, raised berms that provide a daytime refuge for nocturnal beetles.

When night falls, the beetles will come out of hiding to forage for prey. Not only do beetle banks provide an ideal daytime habitat, but they also provide beetles with an insulated overwintering site.

Whilst normally positioned throughout arable crop land, smaller beetle banks, or 'bumps', can be implemented in areas of open space, close to adjacent cover. The banks are planted with tall grasses and native plants. A range of species and heights will also help attract a variety of groundnesting birds and small mammals.



Limagrain Field Seeds UK

Set asides ~

Set asides involve the allocation of land to serve as a wildlife refuge. When the mowing of carefully selected areas of open space is ceased, then plants traditionally considered weeds - such as buttercups, dandelion and yarrow - will be given the chance to flower among the grass.

Although the area will predominantly be composed of grass, any wildflowers present will be able to grow and flower. As the grass varieties flower and produce seedheads, these will attract pollinators. Not only do seeds provide a nutritious food for wildlife such as birds, but longer grass can provide valuable sheltered habitats for many species.

If the location chosen as a set aside is not appropriate, the long grass can be easily returned to lawn by strimming and reinstating a regular mowing routine. No Mow May is an excellent time to trial this measure. If this works well and is well received, further measures can be implemented to create a diverse, balanced meadow in the longer term.

The cost of specially selected seeds can range from $\pounds 6.10$ /kg, sown at a rate of 8kg/acre. Meanwhile, ground preparation can be done at very little cost, given sufficient volunteer capacity.

Swales & filter strips

Swales and filter strips are source control elements of Sustainable Drainage Systems.

Swales are shallow channels used to collect or move water, often covered with grass and flood resistant plants. Filter strips are gently sloping, vegetated strips of land that provide opportunities for slow conveyance and infiltration.

In appropriate locations, they provide a simple, yet effective, way of managing surface water runoff. The grass or other vegetation slows water down, allowing more to soak into the ground. Swales are suitable as a low intervention method in more open rural areas.

Costs will vary and will be dependent on factors such as scale, machinery requirement and volunteer capacity.

As a representative example, smaller volunteer powered projects that cover 50m2 could cost £5,000, whereas larger projects may equate to £460/m2. **Susdrain** offer a comprehensive list of case study examples.

Rewilding site on Tattershall Drive, Market Deeping. Image: SKDC Swales and filter strips

Rain gardens

Based on the concept of Sustainable Drainage Systems, the central notion of a rain garden is that drainage should mimic the way water naturally behaves in the landscape.

Rain gardens are an increasingly important part of habitat design, incorporated to manage surface water runoff in areas at higher risk of flooding. A rain garden is a shallow area of ground that receives water run-off from roofs and other hard surfaces. These depressions can act as infiltration points for run-off and other 'clean' surface water that is low in contamination. Unlike swales, which are more often used in rural environments, rain gardens are ideal in urban environments. Small rain gardens can be implemented to catch water runoff from buildings.

Rain gardens are planted with native vegetation that can withstand waterlogging for up to 48 hours at any one time, with more drought-tolerant plants being placed near the edges.

This offers the opportunity to grow and range of attractive plants that are beneficial to insects and birds. Rain gardens can be easily incorporated into open space design but can also be retrofitted to suit existing residential developments where flooding is a risk.

Rectory Gardens Rainpark in Haringey. This SuDS project will prevent local flood risk and reduce pollution entering the River Moselle. Information and images collated from susdrain.org, 2024.

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Hedgerow planting

Hedgerows act as multifunctional wildlife corridors, providing many benefits to both people and wildlife. Hedges are useful for carbon capture and noise reduction, alongside the provision of shade and privacy.

However, hedges also provide a food source and shelter for many invertebrtes, birds and mammals. This includes bats, who use hedgerows as 'commuter routes' for foraging and roosting.

One hundred and thirty Biodiversity Action Plan species are associated with hedges. This includes lichens, fungi and reptiles. The more diverse a hedgerow in its composition, the more species it will support. A wide variety of native trees and shrubs will provide greater diversity in flowering and fruiting times. As the hedgerow develops, they will contain more dead wood and plant litter within their structure, providing cover for small mammals and a valuable habitat for many invertebrates species. This, in turn, will attract predator species such as bats, shrews and birds.

Hedgerows should be planted at a density of six plants per metre. The ideal composition is suggested to be 60% hawthorn, with the remainder made up of at least four other species from the following: Blackthorn, Hazel, Field Maple, Dogwood, Crab Apple, Guelder Rose, Dog Rose, and Wayfaring Tree. The ideal hedge will have a margin next to it, dotted with hedgerow trees.

The representative cost for 600 plants (covering 100m) is £612.



Tree planting

Living walls

Trees are vital for ecosystem services. Alongside their role in carbon storage, filtering pollutants, reducing temperatures in warm weather and reducing the risk of flooding, trees have a positive influence on human health and well-being, recreation, and community and cultural connections.

Publicly accessible trees and woodland increases the value of nature to the public, and thereby increases public support for restoring biodiversity more widely.

Care should be taken to ensure that the right tree is planted in the right place. Aim to plant a variety of species, varieties and genotypes to provide greater resistance to pests and diseases. Species should be appropriate to the soil type and texture of the site. In built areas, plant locally native species, but more ornamental species of high biodiversity value may also be included.

It is especially beneficial to target 'gapping-up' of existing hedgerows and restoration of lost hedgerows which will help increase habitat connectivity at the landscape scale.

For more information, the Greater Lincolnshire Nature Partnership has an excellent **guide** for tree planting.

A Living Wall is a wall partially or completely covered with vegetation. They may be indoors or outside, freestanding or attached to an existing structure. They can range from a simple, inexpensive 'green facade', formed from climbing plants grown at ground level. These designs are the most versatile and require less maintenance.

However, more complex living walls can have a much larger biodiversity impact. The variety of plant species within these Living Walls provides unique possibilities for habitat preservation and the protection of local flora and fauna, even within an urban setting.

Costs can vary significantly depending on scale, vegetation chosen and materials. Living walls also need additional consideration on positioning and orientation. They often require more maintenance, so are more suited to areas where there is an ongoing management scheme or existing team who would take over responsibility of maintaining plant health.

Bat boxes

Bird boxes

A landscape design that attracts bats will support other wildlife and positively impact on biodiversity.

Bats are predatory mammals and feed on a wide range of nocturnal flying insects. Areas rich in native vegetation will encourage a variety of insects, helping to support great bat abundance and biodiversity. Bat boxes will ideally be placed near to hedges and tree lines.

Bat boxes can be purchased for as little as $\pounds 13$. Higher quality bat boxes are priced in the region of $\pounds 30$ -60. Alternatively, the creation of a bat box can form an ideal DIY project. It is important that only untreated wood is used.

Putting up nest boxes provides nesting sites for cavity or hole-nesting birds.

Different nest boxes exist to suit a range of bird species and locations. There are also specific nest boxes to suit owls. It is especially beneficial to locate bird boxes close to a food source.

There are various bird boxes available, of variable wood quality. Prices range from £5 to £40.



Bug hotels

Hedgehog houses

Bug hotels provide ideal pollinator nesting sites for solitary bees and wasps and are a great way of attracting other species like beetles, ladybirds, spiders and centipedes, which hide away in the cavities of the bug hotel.

Purpose designed bug hotels can be purchased, with small hotels costing in the region of £13, moving up to £475 for larger bug hotels. However, it is also easy to make a bug hotel by layering natural materials to form a structure. These include big rocks, old bricks, different lengths of wood, leaf litter, straw or hay, bark, and some larger branches.



The British hedgehog population is in decline and have been disappearing from our rural countryside. Hedgehog houses provide hedgehogs with safe daytime cover and can increase their chances of survival as a hibernation spot over winter.

Placement of hedgehog homes will have a large impact on whether they become occupied. Hedgehogs prefer to move alongside linear features such as fences or hedgerows. For a greater chance of success, the hedgehog home should be placed somewhere quiet, out of direct sunlight, where it is sheltered from the wind. Also ensure that there is nothing to obstruct the entrance or ventilation.

To promote the connectivity of 'hedgehog highways', creating small gaps in fences is an excellent way of allowing hedgehogs to move through urban areas and prevent them becoming trapped.

Prices can range from £18 to £130.

Community pond

Ponds contribute to the provision of high quality freshwater habitats that support a wide range of species such as frogs, great crested newts and dragonflies.

Ponds act as 'stepping stones' for wildlife to move between areas. As such, ponds should be dug in close proximity to grass set-asides, scrub or hedges.

The edges of ponds and lakes are usually the richest areas for wildlife. To increase this habitat, create long, irregular shaped edges and shallow, undulating banks. Some species prefer cold, deep water, while others need warmer, shallower water. Aim to vary the depth of the pond or lakebed.

Pond creation may be subject to sufficient risk assessment and planning guidance.



Community garden

Community gardens should be formed within spaces that are easily accessible by the community. However, this doesn't need to be in a green or grassy area.

The outskirts of a shared cark park or paved area is sufficient, subject to the necessary permission being obtained.

Plant pots, planters, compost and basic tools are generally required to start a garden. Encourage residents to contribute unused items. It may be beneficial to set out the collective vision for the space in a document, to aid group decision-making.

It is a good idea to signpost community gardens to advertise to everyone the purpose of the initiative and what will be achieved. Start small, then scale the garden up to a manageable level. The placement of single benches can form a quiet area to allow reflection, whilst group benches can help make the garden somewhere to socialise with others. Engage the local community when producing plans for the space. People may suggest features, such as specific raised beds dedicated to growing veg or flowers.

A community garden can be implemented alongside other measures, such as bug hotels, to attract more pollinators. A significant impact can be made in a small area, so creativity is key. Consider reaching out to local community groups and businesses to sponsor or support the growth of the garden.



Dead hedges

Log piles

Dead hedges are piles of branches and twigs, arranged between vertical stakes to form a barrier.

They provide an excellent habitat for a range of insects and invertebrates. Dead hedges can also be placed to discourage people walking across sensitive habitat areas.

Log piles are also a cost-free option creating a hiding space for bugs, insects, hedgehogs and frogs.

This measure is a good way of putting waste resources to good use. For example, the wood of native trees can be used to build log piles near to existing linear features.





Signposting

Public perception of rewilding schemes differs greatly, partly due to a lack of understanding on the scope of projects in both rural and urban environments.

Rewilding can enhance open space into visually appealing, wildlife-friendly habitat.

However, the establishment phase is the most difficult as many people struggle to envisage what the outcome will look like.

To overcome this, signposting areas where rewilding is in progress can help educate the public, improve how biodiversity measures are perceived and provide rewilding initiatives a greater chance of longterm success. Information boards, or more simplistic signs, can be placed to demonstrate the timeline of a project, spotlight species benefitting from rewilding in a particular location, or provide a polite reminder to residents to respect the area. Signs can be more educational or can be more creative, which is ideal for engaging children.

For example, "can you spot" signs can be placed along mini nature trails. This can bring an element of fun to families with children, helping to spark learning and boost local engagement. Other terms may include "hedgehog highways" or "beetle bunkers".

It may be a good idea to acknowledge the change in the area. A simple sign could communicate to residents why a certain measure in place; "pardon the weeds, we are feeding the bees" is an excellent example of this.

Re-wilding Area

This area of grass is being encouraged to go back to nature as part of a re-wilding trial project across the district by South Kesteven District Council.

Our aim is to increase local wildlife habitat and overall biodiversity.

Tall grasses and other plant species will flourish, encouraging wildlife, insects, birds and mammals. Over time more species will move in, creating a balanced natural environment.

We hope that you enjoy watching how nature develops and would politely ask that you do not walk on this area.

Re-wilding area designated on 9 July 2020



KESTEVE DISTRICT

Sign design, as seen on rewilding sites in Market Deeping and Stamford. Image: SKDC

Additional features

Green space improvement is important to many people. To allow residents to make the most use of rewilding project areas, accessibility and enjoyment should be priority considerations.

Benches are an excellent addition to green open space, for their use as a resting place and spot to socialise.

Costs for a single bench vary in the region of $\pounds300$ to $\pounds1,500$, depending on design, material and quality.

The Rectory Paddock in Market Deeping. Image: SKDC

Contact Details

Alternative formats are available on request: audio, large print and Braille

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