ENVIRONMENT AND COMMERCIAL SERVICES DIRECTORATE OF ECONOMIC GROWTH AND NEIGHBOURHOOD SERVICES



WILDFLOWER PLAN 1.0 OCTOBER 2020

Version	Author	Review date	Completed by
1.0	CJ	31 October 2021	



Flowers on Lansdowne Road bunds, June 2020

Executive Summary

- 1. This Wildflower Plan is one of a suite of policies to address Reading's declared climate emergency, and sits with the Climate Emergency Strategy and the Biodiversity Action Plan, as well as Reading Borough Council's Corporate Plan.
- 2. A Rewilding Project was initiated in 2020, which identified large verges where more species-rich long grass could be grown in corridors along the highway. An internal assessment was carried out, and feedback from residents proactively sought. Feedback was substantially positive, and the internal assessment concluded that the experiment had worked in most areas from the point of view of both maintenance and appearance.
- 3. It is proposed that rewilding of larger verges continues.
- 4. The way in which grassland is managed affects the diversity and vigour of the wildflowers within it; more frequent cutting and collecting of arisings weakens grass allowing wildflowers to compete.
- 5. It is therefore proposed that the maintenance regime be changed from an annual cut-and-collect on some rewilded sites to a three-times-a-season cut-and-collect in order to assess the effect on biodiversity and the vigour of both flowers and grass.
- 6. The assessment also found that some sites would benefit from an enhancement of the seed bank through the sowing of native perennial wildflowers.
- 7. It is therefore proposed that some sites be sown with locally sourced wildflowers and cut only at the end of the season to allow establishment.
- 8. The first phase of the project did not involve making any changes in the parks. The Council currently has over 40ha of conservation grassland, which is mown annually in September. There is some scope for additional rewilding, mainly of the edges of parks to create corridors for fauna.
- 9. It is proposed that marginal rewilding be trialled at twelve locations in parks, adding around 2ha (5%) to the current area of conservation grassland. These will be assessed on the basis of biological performance, appearance and difficulty of management at the end of the season.
- 10. It is proposed that the Council continue the public information and consultation started in 2020.
- 11. While most people say that they respond positively to a 'natural' look, the reality is that many respond better when nature has been enhanced. On high-profile sites, it may be desirable to consider naturalistic but idealised meadow-like landscapes that include more colour and provide pleasure for a long period. This might involve excluding most grasses and introducing some non-natives.
- 12. It is proposed that the Council works with business partners to create enhanced-flowering, wild-looking commercial centre schemes that will raise the profile of the rewilding initiatives and contribute to refocusing perceptions of Reading as a 'green/wild city'.

1. Current situation

1.1 Background

The Council's rewilding project is aimed at dealing with two different aspects of the climate emergency: carbon sequestration and biodiversity.

In 2018 the Council declared a climate emergency, and, together with partners from all sectors (public, business, voluntary, education), has been working out what changes should be made to attempt to address this.

In early 2020 the Reading Climate Change Partnership consulted on the Reading Climate Emergency Strategy (RCES). Within the 'Nature' theme of the strategy is a wide-ranging requirement to improve the urban environment for flora and fauna.

At the same time, the Council was consulting on the Biodiversity Action Plan. The plan is focused on promoting natural solutions to climate challenges, such as improving habitats to help wildlife and people adapt to the impacts of climate change. It sets out priority objectives and actions for the protection and enhancement of biodiversity within Reading.

Independently, the Council has been receiving an increasing number of enquiries from residents about improvements for biodiversity across the Borough, the most frequent of which are for a change to highways verges cutting practices and tree planting. This needs to be considered together with the desire for a higher level of tidiness and quality of the public realm, and the Parks Department is aware of the potential for un-cut grass verges to attract complaints. These will be addressed by maintaining close cut margins to all the rewilded verges, litter picking and by installing information signs.

The Council is aware of the importance of grassland in combatting climate change. Grassland is an effective store of carbon: globally soils contain about twice as much carbon as is present in the atmosphere and three times what is stored in vegetation. From the point of view of carbon sequestration, rewilding is a quicker win than tree planting. In trees, most carbon is stored in the canopy, and carbon sequestration increases as canopies expand. In grassland, most carbon is stored below ground. Here, the storage is stable, as carbon is released only when ground is disturbed (2012, Natural England). Recently published research found that the more diverse the grassland in terms of species variety, the greater the carbon storage (2019, Nature Communications 10).

1.2 Rewilding Project Phase 1

A Rewilding Project was initiated under the new Biodiversity Action Plan, as one commitment in the RCES Nature theme. The project started by reviewing the mowing regime of highways verges to allow, where appropriate, more species-rich long grass in corridors along the highway. The first objective was to find out what this 'rewilding' would look like.

The changes in the first year were an experiment, testing several things: (i) what different verges in different parts of Reading look like over the course of the

flowering and seed-setting seasons; (ii) how residents respond to changes in the mowing regime; (iii) how to carry out practical maintenance issues like cutting and collecting, margin mowing, etc.; and (iv) whether there are ecological improvements coincident with changes to mowing patterns.

The changed regime involved not cutting many large and long verges, monitoring these sites for the quality and variety of grasses and other plants, and encouraging members of the public to spot and report insect life and any rare or unusual plant species.

Public information was provided by on-site signage as well as on the website. Feedback was encouraged, both supportive and dissatisfied, and this was monitored throughout the growing season.

To preserve a cared-for appearance, the rewilded verges were to have borders close mown: 2m minimum width adjacent to a road, and one mower deck width alongside footpaths, and an effort was made to increase the frequency of cutting of these mown borders and smaller verges so that the public realm looked tidy and cared for. Even on verges to be left uncut, traffic splays and other sight lines were cut, and on large verges, mown paths acting as firebreaks were maintained.

The first phase of the project did not involve making any changes in the parks. The Council currently has 40ha of conservation grassland, which is mown annually in September, and this is unchanged. The primary reason was that, in 2020, it was necessary to close-mow as much as possible, so that people had well-maintained space for outdoor exercise during Covid-19-related lockdown.

1.3 Assessment of Phase 1

The trial was intended to inform future decisions about rewilding that took account of local preferences, botanical and biodiversity value, and landscape value. An assessment was planned, so that, for future years, it could be decided which verges to leave and which to resume mowing. Consideration would also be given to which verges may require enhancements in the form of adding to the reserve of wildflowers.

The assessment of the success or otherwise of the experiment has four aspects:

- Does it work from a management and maintenance point of view?
- What did the sites look like later in the season?
- How did each site work in terms of the variety of flora (and fauna) found?
- Did the project receive the approbation or criticism of residents?

Inspections were carried out during and at the end of the season. A site-by-site assessment based on these inspections is set out below in Table 1. This tabulated report seeks to answer the first two questions above. Thumbnail photographs are included for most sites.

Table 1: Assessment of Phase 1 verges not mown for rewilding purposes

	Assessment	Photograph
A33 both sides	This is a gateway site, with seminatural areas on both sides, so lends itself to rewilding. Make separate bid for funding to sow with native/non-native mix for long flowering season.	
Rose Kiln lane bank	Not possible to cut and collect this steep bank so return to regular mowing.	
Basingstoke Road/ Gillette Way	Lots of publicity earlier in the year on twitter and other social media about rare wild flowers in this area. Not so much flora in the latter half of the year after the hot spell of weather. Historical drinking site: literally hundreds of beer cans removed from bushes and undergrowth. No access for tractor. Would need to be smaller machine for cut and collect. Few complaints about untidiness plus potential interest from new owners of old Gillette buildings. Recommended to retain.	
Northumberland Avenue roundabouts	Subject to ASB (people driving over the roundabouts); long grass does not stop this, and makes tracks more evident. Mow.	
Swallowfield Drive	Would benefit from wildflower sowing, providing some colour amongst the buildings in this area. Easy to maintain site and no complaints. Recommended rewild and enhance.	
Blagdon Road	Most of the verges on Blagdon Road are managed by Affinity Housing. The section on the top was left unmown, and attracted positive responses from local people, one of whom is collecting money to enhance with wildflower seeds.	
Hexham Road	Laid to wildflower turf in 2012. This has survived remarkably well, and an independent assessment after 5 years found it to be one of the most species diverse sites in urban areas ever seen by the ecologist.	
Rembrandt Way banks	Long grass stems with large seed heads and little else. Not possible to cut and collect this steep bank so not one for the future.	
Tilehurst Road/ Liebenrood Road roundabout	Large roundabout on a busy road. The roundabout is banked so may prove difficult to maintain regularly. Perhaps we could extend the rewilding area (or replace it) in nearby Prospect Park.	and I
Circuit Lane/ Devils Dip	Circuit Lane/Devil's Dip rewilding area is another area which used to be left as conservation grass in the past. Traveller incursions forced us to install bollards around the area and the site has been rewilded ever since. Good variety of flowers including the omnipresent Achillea millefolium (Milfoil) and Hypochaeris radicata (Spotted cat'sear), Blue Mallow, Docks and Thistle. We have extended the uncut area to encompass part of Circuit Lane. No real feedback of note. Retain.	

Florian Gardens	A good site, especially in the spring. Looks well maintained with the edges strimmed; low litter accumulation. No access issues or negative feedback; ideal site. Retain.	
Dwyer Road/ Burghfield Road	Dwyer Road has all the usual flora in evidence Achillea millefolium (Milfoil), Hypochaeris radicata (Spotted cat's-ear), Docks, Sinapis arvensis (California rape). Looks well maintained, edges strimmed; low litter accumulation. No access issues or negative feedback; ideal site. Retain.	
Mayfair	Quite small areas were on show when The Mayfair was inspected suggesting that some residents took to cutting the grass which was left for rewilding. There is no point rewilding areas where people actively mow grass. Not recommended.	
New Lane Hill	Good variety of flowers. We have cut a channel for the gentleman in the corner who looks after his house frontage. Would benefit from wildflower seed and no complaints about grass begin left uncut. Only issue would be that there are services underground and it does seem to be dug up on a regular basis. Retain.	
Lansdowne Road	Spectacular array of flora in the bunds surrounding site. Mostly grassland behind it. There were some complaints about the scruffiness of the bunds and how sight lines to the road have been affected etc but the Highways Inspector found no problem. Regular cutting and collecting of the bunds may be difficult, but it is worth trying because of the variety of flowers and support from active residents who have added wildflower seeds to the bunding. Retain and enhance.	
Bran Close	Bran Close is a nice little site. Plenty of interest and diversity. Front of Blundell's Copse used to be left unmown in the past. Our problem is access because of the of the planters placed on the green to prevent traveller incursions. Recommended to be kept. No real feedback from residents.	AST IS
St Michael's Road green	Small site which would benefit greatly from wildflower sowing. Very little in the way of flora, just some Achillea millefolium (Milfoil). Retain.	
St Michael's Road/ Walnut Way green	Small site surrounded by bunds. The bunds provide the main area of flora with hardly any flowers in the grass behind. Nice spot for enhancement. There is interest in this site from Tilehurst Globe.	

Fircroft Close green at rear	Good potential site however, at present we don't have a the correct machinery to cut and collect this large bank safely and the resource required is currently beyond the capacity of the service. It will be excluded from the current experiments but will be included if suitable resource and equipment can be found.	
Rodway Road	Rewilding was stopped early because of the bin men's needing to drag the bins down the banks to the lorry. Mow.	
Vale Crescent bank	Not possible to cut and collect this steep bank so return to regular mowing. Small site. Mostly grass. Easy to maintain. Retain.	
Overdown Road opp. Overlanders End		
Overdown/ Oxford Road roundabout	Gateway location; suggest unique treatment of annual rotovation and sowing with annual wildflower mix.	
Norcot Road roundabout	Hand mown by Gardens Team. Should be enhanced as easy to maintain.	
Norcot Road banks	No real value as a rewilding site and need to explore alternative planting regimes e.g. bulb planting. Site prone to litter accumulation and looked untidy when left long.	
Links Drive Meadow Park Academy/	Large thistles on bund were quite extraordinary. However, there was very little interest in the grass area behind this. There is some evidence of antisocial behaviour which would have been screened off by thistles. Large bunds would make cut and collect impossible as the tractor cannot safely traverse them. Not recommended; mow. High traffic area site with nearby school and 17	
Portman Road (behind kneerail)	bus route. Wild flower seed. Large grassed area performed well in terms of flowering; would benefit from sowing wildflowers and provide a really high-profile rewilding site given its location. Not one complaint received and ties in nicely with Barnwood Close. Retain.	
Barnwood Close	Quite a lot of litter here but there has been a good display of flowers here throughout the year. Keep on Rewilding list but site would benefit from regular litter picking. Bunds will need strimming. There is access through Barnwood to main site on Portman, so suitable for the large mower and tractor.	
Rotherfield Way/ Southdown Road	Verge half way down performed well and valued by residents. The verge opposite the Southdown Road banks, which was not a popular location for rewilding for some residents, should be treated as an alternative rewilding site to the banks. This is in front of a woodland area and can easily be managed as part of the project. Recommended rewild and enhance.	

Buckingham Drive/ Peppard Road	Mostly knee high grass with channels cut through for pedestrian access. Mostly Achillea millefolium (Milfoil) and Hypochaeris radicata (Spotted cat'sear) in small concentrations at either end of the area. Looks well cared for. Retain.	
Lower Henley Road banks	Long grass stems with large seed heads and little else. Not possible to cut and collect this steep bank so not one for the future, which is a shame, as several residents reported seeing a variety of insects.	
Emmer Green Pond	Lots and lots of complaints from the residents in the nearby flats, including verbal abuse of grass-cutting staff. However, the site is excellent for biodiversity because of the nearby pond and a wide range of wildflowers. Retain.	
Stuart Close	Nice secluded site which already had some plant diversification and interest. Popular with dog walkers and children. There was an early request to cut a section for children to play, which was done. In the end, there were complaints about the grass being cut at the end of the season, so the rewilding is well supported. Retain and enhance.	



Rewilding signage, 2020

From a maintenance point of view, the conclusion is that the experiment has been successful. Very few sites - almost exclusively involving steep banks or tight access - preclude cut-and-collect mowing. A build-up of litter was reported on a few sites, notably along major routes like the A33, Gillette Way and Portman Road, but these were litter picked before mowing.

In terms of appearance, all areas looked colourful in the spring, as expected. It was a particularly good season for buttercups, and most sites glowed yellow for many weeks.



Virginia Way, between Coronation Square and Florian Gardens, May 2020

Later in the season, the flowering of species other than grass was much less evident, with grass flowers and a few tough species like *Achillea millefolium* and *Hypochaeris radicata* dominating. The exceptions were sites like Lansdowne Road, where the bunds were seeded and there was a large variety of flowering species.

The response of residents was overwhelmingly positive. Around 115 responses were received, mainly through the dedicated inbox, of which about 20% were critical and the remainder enthusiastically supportive. Examples of these are below. There were also hundreds of 'likes' on the Twitter feed. It is impossible not to conclude that residents are receptive of the project and wish to see it continued.

Hi there. I just wanted to say I support this scheme 100%. It's a win win, from my point of view, more attractive because for me even longer grass that doesn't go brown so readily in the hot part of the year looks better, but also saves money. A total no brainer. Wildflowers do still take a bit of maintenance but nowhere near as much as continuous aggressive mowing that destroys everything, even the grass really if too short. I do not want to live in such a barren landscape and hate the waste. To be this is an all round intelligent solution. Thanks very much. Ian.

You asked us to let you know what we think of the rewilding scheme in Reading. I love it! I live on Rotherfield Way and walk past the rewilding area here every day. I think it looks great, as well as having a positive effect on the environment. I am always happy to see it as I pass by. I wholly support the scheme and would love to see it extended to wider areas. It makes me proud of Reading! Kate

I think this is not only a fabulous idea but it is essential. Its a win win situation. The environment benefits and so does the council in terms of financial gain. The only thing that I would like to see is more sowing of wild seeds to add to the diversity of flowers available to wildlife. This would also add to the beauty and make it more palatable to the people that are less keen on the visual aspect. I look forward to hopefully seeing an abundance of wild flowers on our verges. I know that in the Pottery estate, for example, some people do not like the 'over grown grass' look. I am sure that would change if they were looking out on a more colourful and pretty sight. I personally don't have an issue with it. Karen

I would like to thank you for what is being done on the 'rewilding' project. Since lockdown my husband and I have taken daily walks around Prospect Park and Southcote and have been delighted by the beautiful wild flowers and grasses that now grow in the verges and meadow areas. It is a joy to watch the different varieties of plants growing through the weeks and seeing all the insects, bees and birds that they attract. Please keep it going! Hilary and Mike

I just wanted to let you know that I have recently seen your rewilding posters on the banks of Lower Henley Road and I think this is a brilliant idea and well communicated. I'd love to see reading council let grass verges grow wherever it is safe to do so and also to encourage residents to provide wild areas in their gardens too. Well done on this really valuable initiative! Sophie

Resident of Bran close, Tilehurst. What flowers what butterflies, an old concrete post...Just another excuse not to cut the grass. The grass is a mess outside our private homes. We were never informed or had any letters regarding this change. Council tax has gone up yet again and now getting less! I've been down this road before, years ago regarding cutting the grass, now your at it again. Cut the grass please.

No systematic survey of biodiversity was carried out. Residents were asked on the website to report sightings, but only a few comments were received:

I know you asked for sightings of birds and butterflies. However I think this warrants a mention. I spotted a deer in Barnwood Close on Saturday 20 June at 8pm (video attached). Lovely to see but I worry about it getting injured on the busy surrounding roads. I have also been told there is a fox that visits regularly in the early hours. And I have seen large dragonflies in my garden this year, as well as on the nearby section of Oxford road. Angela

Awesome. I think it is great that you are Rewilding this town, I walked along Lower Henley Road in Caversham and enjoyed walking by the long grass hearing the crickets, I also saw some wild flowers coming in and a good amount of butterflies too, it is working! Calvin

I saw a grasshopper jump out of the grasses at the above location [Lower Henley Road] last week. Good to see the rewilding initiative! John

As noted earlier, inspections found that diversity of non-grass flowers declined over the season, except where specific seeding had been done. This suggests that overseeding with wildflowers may increase the display element of rewilded areas.

Before proposals for the next growing season are developed, this report sets out the rationale for a change to the management of rewilded sites over the next three years. This is based on advice received by Dr Phil Sterling, an ecologist and former grounds maintenance manager at Dorset County Council.

2. Ecology, grass and wildflowers

2.1 Rationale

Grass growth is governed by rainfall, soil fertility, sunlight and temperature. Higher amounts of all of these increases the rate of growth of grass.

Vigorous grass competes out other species. The most effective way to encourage wildflowers to flourish in grass is to reduce soil fertility. This is done by repeatedly cutting grass and removing the cuttings. The grass draws nutrients out of the soil, so, if it is cut and removed, nutrients are taken away and not returned to the soil.

Over successive seasons, the result is shorter grass and greater species diversity. Over time, it should be possible to reduce the cutting regime from 10 cuts annually to 2 or 3 cut-and-collect mowings each season, and the grass remains relatively short, because growth is suppressed. There are also more wildflowers, which are, in fact, an incidental by-product of the process.

More diverse plant species - grass and flowers - feed and provide cover for a wider range of insects. Habitat improvement is therefore a further by-product of several seasons of cut-and-collect mowing.

However, management regimes may as well include moving regularly within 2m of a road, because research shows that pollinating insects tend not to use flowers in this belt (2019, *The Applied Ecologist*).

2.2 Process

- Timing: Cut early (Mar/Apr), mid-summer (Jul), and late (Sept/Oct) but this is a guide only; for example, if it looks horrible go and cut it.
- Area selection: Small areas have less wildlife value, so more extensive sites are better, but avoid areas with large amounts of street furniture where grass needs to be close-mown. In other words, where you can't do it, don't.
- Method: Cut and collect with ride-on machinery; it is too time-consuming to mow large areas by hand.
- Disposal: Deposit arisings in small heaps on local areas of the same land designation, for example, highway to highway (so as not to constitute waste). If this is not possible, then collect recycle. The need to deposit arisings will reduce over years. Waste will be contaminated with litter; it is better to hand pick litter before cutting.
- Increasing species: encourage (or top up with) perennial, native mixes generally, don't go for high impact non-natives, except in locations where impact is more important than ecology. Aim for a succession of flowering times to maximise both visual and ecological effect.

In summary, we are therefore proposing that we change from an annual cut-and-collect on some rewilded sites to a three-times-a-season cut-and-collect in order to assess the effect on biodiversity and the vigour of both flowers and grass.

3. Phase 2 proposal

3.1 Highways verges

Arising from review of Phase 1 sites, it is proposed that

- Most rewilding sites should be retained as sites for biodiversity
- All of the banks should be returned to a regime of regular mowing, because
 of the difficulties associated with cut-and-collect mowing on a steep incline
 at the end of the season
- Some sites that were mown in 2020 have been identified for addition to the rewilding programme for the 2021 season. These include Wensley Road green, Cintra Avenue and parts of Milestone Way.

Advice was sought from the ecologist Dr Philip Sterling, who has pioneered adapting the ecological approach to amenity grass management for use on highways verges in Dorset and Devon. Following this, a new way of managing several sites should be trialled in 2021. These will be mown three times during the season. This will be done for at least three years, and then the effects on grass and flowers will be assessed. It will be necessary to explain what is being done on the website and via signage, or there will be criticism about cutting flowers down in their prime or about not allowing seed to set.

Several sites should be set aside for seeding with additional flowers. In order to allow germination and establishment, these areas should be mown only once, at the end of the season, for two or three years after sowing, and then they should be compared with the 3x-mowing unenhanced sites for the relative effectiveness for wildflower establishment.

Table 2 shows the revised list of Highways verges for rewilding, indicating which maintenance regime will apply: either mow three times each season, or overseed with native flowers and mow once at the end of the season.

Table 2: Confirmed list of verges with reduced mowing regime for rewilding purposes, including those for 'enhancement' with additional flower seeds

	No. of cuts	Enhancement
A33 both sides	3	
Basingstoke Road, Gillette	3	
Basingstoke Road, Hartland Rd to Aldi	3	
Swallowfield Drive	1	✓
Hexham Road	1	
Tilehurst Road/Liebenrood Road roundabout	1	✓
Circuit Lane/ Devil's Dip	3	
Dwyer Road/Burghfield Road	1	✓
New Lane Hill	1	✓
Lansdowne Crescent	1	
Bran Close	1	
St Michael's Road green	1	✓
St Michael's Road/Walnut Way green	3	
Overdown Road opposite Overlanders End	3	
Overdown Road/Oxford Road roundabout	1	
Norcot Road roundabout	3	
Meadow Park Academy/Church End Lane jn	3	
Portman Road (behind kneerail)	1	✓
Barnwood Close	1	✓
Rotherfield Way (large areas)	1	✓
Southdown Road adj. Marshland Square	3	
Marshland Square roundabout	1	✓
Peppard Road, Buckingham Drive	1	✓
Emmer Green Pond	1	✓
Stuart Close	1	✓

3.2 Parks

The Council currently manages over 40 hectares of parkland for biodiversity. Table 3 sets out the list of parks where there is already extensive conservation grassland.

Table 3: Sites of Conservation Grass in Reading Borough

	Area in hectares
Arthur Newbery Park	3.9
Balmore Walk	1.7
Bugs Bottom	9.2
Clayfield Copse	2.8
Coley Park Allotments	0.8
Comparts Plantation	1.2
Deans Farm	1.4
Fobney Island	1.5
Hills Meadow	2.1
Mapledurham Playing Fields	0.5
McIlroy Park	4.2
Prospect Park	2.8
Prospect Park RSME	0.8
Rivermead (until August)	4.4
Southcote Linear Park	0.9
Waterloo Meadows	2.6
	41.1 ha

In addition, it is proposed to introduce more areas of unmown grass for reasons of improving biodiversity in public parks, particularly on the margins, where there will be more cover for wildlife.

The following criteria have been applied in drawing up the proposals

- Avoid areas that are used for recreation: sport, dog-walking, play, picnicking, etc.
- Create a balance, so that a variety of human experience is created within larger sites and across the Borough
- Select areas that are important for linking up wild zones to create wildlife corridors
- Avoid areas that are likely to become litter traps

It is proposed that the Council carry out an experiment in 2021 in parks along the same lines as the 2020 trial on highway verges. Table 4 lists those parks in which there is land suitable for a rewilding trial, that meets all criteria above. These areas will add around 5% to the area currently mown as conservation grass to allow the Council to test the response.

Table 4: Proposed new rewilding areas in parks

Park	Location	Area
Cintra Park	Zone 'outside' the perimeter path	0.2 ha
Coley Recreation Ground	Some of the bank to the west of the park	0.15 ha
Edenham Crescent	Strip along the railway line	0.05 ha
Emmer Green Rec. Ground	Area adjacent to the pavilion	0.03 ha
Kings Meadow	Southern perimeter (Napier Rd/Luscinia View)	0.2 ha
Kings Road Gardens	Strip on top of the bank	0.01 ha
Milestone Way	Selectively	0.25 ha
Palmer Park	Perimeter 'outside' the avenue SE corner to play area	0.22 ha
Prospect Park	Bank sloping towards Tilehurst Road	0.1 ha
Shinfield Recreation Ground	Southern half of the site	0.3 ha
South Whitley Rec. Ground	Selectively	0.25 ha
Whitley Wood Rec. Ground	Old tennis court area	0.24
		2.0 ha

The new trial sites in parks will be subjected to cut-and-collect mowing three times during the growing season, for the same ecological reasons as set out above, and for the additional reason of keeping sites from looking too untidy. As with the 2020 rewilding project, requests for feedback from parks users will be sought, and an assessment will be completed by Parks staff at the end of the season.

3.3 Publicity

The public information strategy is key. As with the highways verges project, the intentions and benefits need to be made clear.

- The proposed changes and the reasons for them will be posted on the Council website.
- Temporary, laminated signs will be erected on new areas to explain what the Council is trying to achieve.
- A press release will be drafted.
- Posts will be made on social media.
- As before, each of these will include an invitation to monitor species and report findings to the Council via a dedicated email account.

4. Flowers for beautification: town centre locations

4.1 Classification and provenance of wildflowers

When people imagine wildflower meadows, they usually think of native annuals - poppies, cornflowers, corn cockle and corn marigold - or biennials. like foxgloves and forget-me-nots. These all have large, colourful flowers. The entire life cycle of an annual plant from germination to seed-setting occurs in one growing season. For seeds to germinate each year, they typically require disturbed soil, so annual cultivation and topping up of seed is needed, with significant maintenance costs.

If an area is left uncultivated, other plants seed themselves in, outcompeting the annuals. These plants tend to persist over succeeding years, increasing their colonies by setting seed. Examples of perennial plants are bugle, campion, ragged robin, primroses, campanula and ox-eye daisies. With some exceptions, they tend to be less showy. To ensure diversity of perennial wildflowers, it is necessary to start by preparing the ground and sowing seed or laying wildflower turf.

Other well-loved perennials are spring bulbs, the most reliable of which include daffodils and crocuses, but others are wild garlic, fritillaries, and bluebells.

The colourful season for native wildflowers is relatively short. Flowering is followed by a 'brown season', when plants are setting seed. The way to prolong the flowering period beyond spring and early summer is to introduce non-native varieties. There are sharp differences of opinion about exotic plants. However, academic research is showing that, with some exceptions, insects require pollen and nectar and will collect from non-native sources where these are available.

4.2 Wildflowers and public perception

While most people say that they respond positively to a 'natural' look, location is important in influencing the response. Where 'wildness' is expected, people will tolerate an ecologically authentic meadow that only looks good for a few weeks followed by yellowing grass and brown seedheads.

In more urban settings, the reality is that many respond better when nature has been enhanced. Long-season interest, colour and good structure are vital if residents are going to embrace rewilding as part of the civic environment.

Particularly on high-profile sites, it is desirable to consider naturalistic but idealised meadow-like landscapes that establish relatively rapidly, thrive in normal conditions, but provide pleasure for a long period. This might involve excluding most grasses and introducing some non-natives.

On town centre roadsides, mixes need to be able to withstand salt pollution and dry conditions. Research shows that pollinating insects tend not to use flowers within 2m of a road, which further suggests that appearance on the roadside is more important than replicating 'natural' meadowscapes.

4.3 Proposal for Reading and neighbourhood centres

The plan at the end of the document suggests areas of land in public ownership in and around Reading town centre that could be planted with wildflowers. Clearly, there is land in private ownership that might be considered by business partners for complementary flower schemes.

Other locations that could be treated in the same way are the main shopping areas in Tilehurst, Caversham and Whitley, where there is land for wildflower planting, as well as corridors into Reading, like the A33, Oxford Road, London Road and Henley Road.

4.3.1 IDR splitter beds - perennials

It is proposed that a long-flowering mix of both native and exotic, drought-tolerant, perennial wild-looking flowers be planted ringing the town centre to demonstrate in a highly visible way Reading's commitment to implementing the action plans attached to the Reading Climate Change Partnership Strategy. These could include a range of perennial plants, both native and exotic, as in the picture below. It is important that the mix does not require irrigation because of the health and safety implications of achieving this in the middle of an urban road.



A roadside mix in Coventry

4.3.2 Roundabouts - annuals

Given the high impact of annuals, it would be worth sowing at least one roundabout with a mix that includes a high proportion of annuals early on, like the one in Rotherham pictured below. This is a more expensive method of providing wildflowers, because of the ongoing establishment and maintenance requirements, but it should at least be considered for its significant public relations value.



A roadside mix in Rotherham

Alternatively, a mix with a higher proportion of perennials can still be effective as in this roundabout in Swindon.



A roadside mix in Swindon

The examples on these two pages are of mixes supplied by the Sheffield-based company, Pictorial Meadows.

4.3.3 Larger areas within commercial centres - perennials and annuals

In larger areas, it may be desirable to lay wildflower turf to ensure establishment. Wildflower turf generally incorporates a geotextile that suppresses undesirable weed seeds already in the soil from germinating, although there is no method that prevents the seeding in of other species over time. Turf will require irrigation, but, over larger areas, the early effect is less patchy.

A local company, Wildflower Turf, which pioneered commercial wildflower turf in the UK and supplied much of the stock for the London Olympics site has a variety of mixes, containing both native and naturalised exotics. The Wildflower Native Enriched mix, for example, contains 33 UK species and around 20 exotic species. The mix is a colourful, insect-friendly low maintenance product that will naturalise over time. It is salt-tolerant, weed-suppressing, grows to a maximum height of 76cm, has been designed to extend the flowering season with a variety of colour from April to October.



Native Enriched mix

4.3.4 Civic Offices

Consideration should be given to planting wildflowers as exemplar gardens around the Civic Offices both to improve biodiversity in the town centre and to demonstrate to residents what is achievable even in a relatively small space. This would have an educational purpose. To do this, it will be necessary to remove some of the existing planting around the Civic Offices, starting with the southeast corner adjacent to the front entrance. Over time, it may be possible to extend this. For example, the existence of trees along the eastern façade opposite The Oracle makes removal for alternative planting difficult, although it may be possible to develop a scheme here in the future.

4.3.5 Implementation

To implement a new project will take up to four weeks, depending on how much clearance needs to be done. Work should be done in March or April, or in September, although is obviously dependent on weather conditions.

Establishment requirements are:

- Clearance, which may involve removal of plants, roots and any rich top soil
- Raking and levelling
- · Either seeding or the laying of turf

Maintenance requirements are:

- Irrigation until established
- Mowing as required (cut and collect)
- Topping up of seed, especially annuals
- Weeding

The scheme is partially self-perpetuating as the seed that is released each year is allowed to return to the soil. This reduces the need to reseed in the succeeding years, allowing the site to increase in terms of numbers and biodiversity - although no scheme entirely eliminates subsequent intervention to ensure persistence of flowering varieties.

4.4 Benefits

The main benefits of rewilding are biodiversity and carbon storage. Idealised flower planting in the town centre makes a smaller contribution to these objectives, but has other value:

- Visual amenity: improves the appearance of Reading town centre.
- Better air quality: reduces greenhouse gases both by reduced grass-cutting requirements and by absorbing CO₂ emissions from vehicles from the air.
- Health benefits: improves physical health through better air quality.
- Storm water: controls the run off of water from storms and heavy rain, reducing the rate of water released on the road systems.
- Education: demonstrates what is possible in urban environments.

4.5 Cost

It is very difficult to cost a general rather than a specific proposal. As a rule of thumb, we suggest £5,000 for the clearance and planting of a roundabout.

