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# Aiming high for hedgerows

Targeting hedgerow action in England





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## Why aim high for hedgerows?

Hedgerows are the vital stitching in the patchwork quilt of the countryside, lending beauty and character to the landscapes we all love. They provide essential homes and corridors for wildlife and help tackle the climate crisis by capturing carbon. In towns and cities, hedgerows provide useful water drainage, clean the air and shelter urban wildlife.

CPRE has championed hedgerows since the 1970s when we began our campaign for existing hedgerows to be protected. In recent years, we have been calling for a 40% increase in the extent of hedgerows by 2050, as recommended by the UK Climate Change Committee to support the government's legally binding target of net-zero carbon emissions by 2050. We welcomed the first ever hedgerow target, announced in 2023, to create or restore 30,000 miles of hedgerows by 2037, and 45,000 miles of hedgerows by 2050, under the refreshed 25-Year Environmental Improvement Plan (EIP).

The task now is to deliver the target in the most effective way, based on an understanding of where hedgerow creation and restoration should be focused in England. We commissioned the Organic Research Centre (ORC) to provide evidence to support the task and identify where the hedgerow target can be delivered and what investment is needed to do so.

This research shows where hedgerow action should be focused around England and identifies areas that are of highest priority for hedgerow creation and restoration. Indicative targets for each landscape have been determined, describing the kilometres of new and enhanced hedgerow that could be delivered to achieve the 2037 EIP target.

### The method

Information on the varied character of England's landscapes has been used by ORC to understand more about hedgerows around the country. There are 159 different National Character Areas in England, developed by Natural England<sup>1</sup>, the government's advisor for the natural environment. The NCAs are referred to throughout this report as 'landscape areas' or NCAs. Each of the NCA profiles include key facts, data, and 'Statements of Environmental Opportunity', and many include details of the need for improving hedgerows.

The information in the NCA profiles was investigated by ORC and helps form the framework used to break down the national hedgerow target and to analyse each landscape area in terms of priority and opportunity for hedgerow action. By using details in these profiles, the research has identified where and how the government hedgerow target could be achieved.

Each landscape area was assessed and scored on a scale of 1-3, with 3 being the highest priority areas for hedgerow creation and restoration, followed by the medium priority areas, and those scored as 1 for the lowest priority.

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<sup>1</sup> Natural England (NE) is the government's advisor for the natural environment in England, including landscape and people's access to and enjoyment of nature.



The criteria used to score each landscape was focused on:

- (a) the intactness of the historic hedgerow network;
- (b) the condition of existing hedgerows;
- (c) policy support for new hedgerows as captured in Statements of Environmental Opportunity and Countryside Stewardship Priority.

In each NCA, suitable habitat for hedgerow planting and restoration was identified by Geographical Information System (GIS) analysis. Indicative NCA-level hedgerow targets were then calculated on the basis of both priority and opportunity and focus on the EIP ambition of creating or restoring 30,000 miles (48,280km) of hedgerow by 2037.

## Key findings

### Understanding hedgerows

- The research found that 34 (21.4%) landscape areas had historically high levels of hedgerow cover which have subsequently been lost and not replaced to a significant degree. These are the priority landscapes for hedgerow action under this criterion. 74 (46.5%) NCAs were categorised as having lost a significant amount of hedgerow, but also having experienced a significant or notable degree of restoration in recent years. Only 51 (32.1%) of the NCAs had largely retained their historic levels of hedgerow cover.
- 46 NCAs (28.9%) had many of their hedgerows in a poor condition making them targets for restoration efforts. 80 of the 159 NCAs (50.3%) were classed as having hedgerows of predominantly medium condition, whilst only 33 NCAs (20.8%) were found to have the majority of their hedgerows in good condition. The latter were often areas already renowned for their wooded landscapes and many included National Landscapes.<sup>2</sup>
- Most NCAs (147 or 92%) had Statements of Environmental Opportunity or related Countryside Stewardship Statements of Priority that included a mention of hedgerows. For two thirds of these, hedgerows were a key target. Only 12 NCAs did not reference hedgerows in terms of this policy support.

### Prioritising hedgerow action

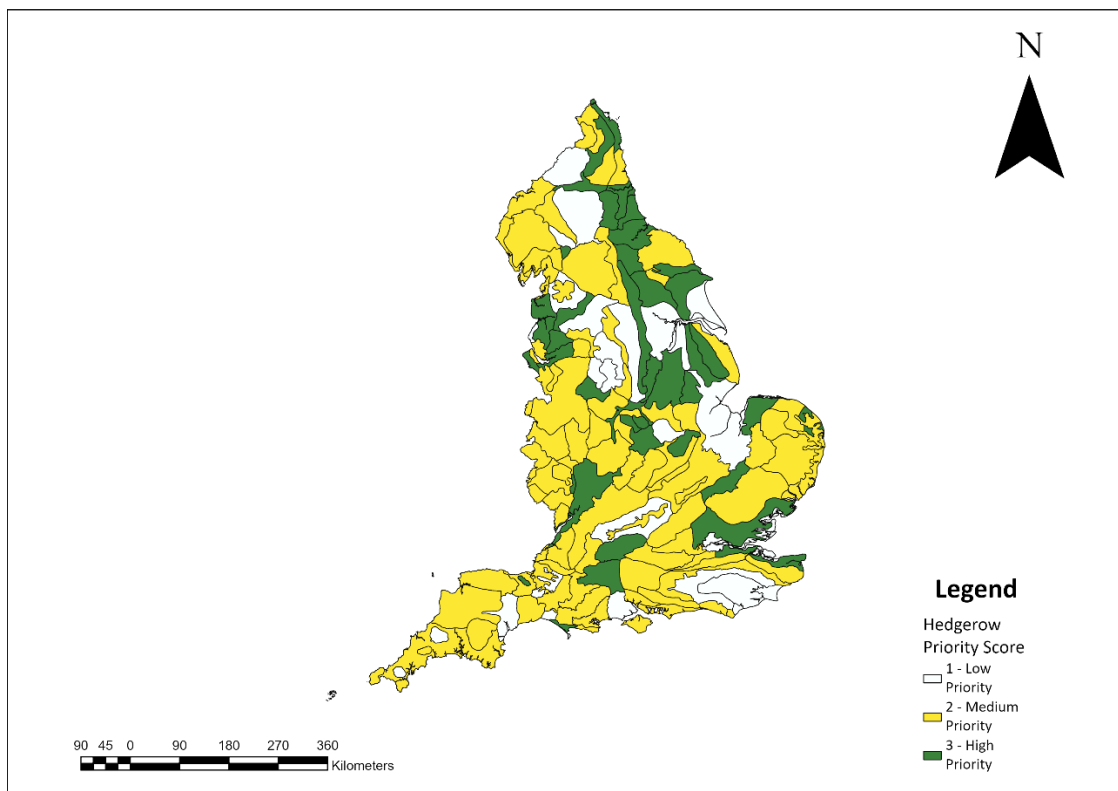
- When the historic extent and loss of hedgerows, as well as their condition and level of policy support detailed in National Character Area (NCA) profiles, were considered, 40 (25%) landscape areas were classified as high priority for hedgerow action, such as the Northern Thames Basin, which stretches between Hertfordshire and Essex and is the most significant by size at 251,000ha.

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<sup>2</sup> There are 34 National Landscapes in England, and these were previously known as Areas of Outstanding Natural Beauty (AONBs).



- The top three priority urban areas for hedge action were Tyne and Wear Lowlands (44% urban land), Lancashire Coal Measures (36% urban land) and Northern Thames Basin (32%).
- 86 (54%) of landscape areas were classed as medium priority for hedgerow action and 33 (21%) landscapes were classified as lower priority for hedgerow action eg with little precedent for hedgerows and scope for an extensive/healthy hedgerow network.
  - a. Lowest scores include The Humberhead Levels in Yorkshire, whose large, geometric fields are bounded by ditches rather than hedgerows, and the Southern Pennines, between the Peak District and the Yorkshire Dales National Parks, where large-scale sweeping moorlands are enclosed by drystone walls.



- Eight landscape areas received the maximum score for high hedgerow opportunity across all three criteria (historic extent and loss of hedgerows, their condition, and level of policy support) and these are concentrated in the northern half of the country, aside from one in southern England. The Trent and Belvoir Vales landscapes, which covers large parts of Nottinghamshire, Lincolnshire, and a part of Leicestershire, is the most significant by size at 177,600ha.

### Top eight areas with maximum score for hedge action

1. North Northumberland Coastal Plain (Northumberland)
2. Howgill Fells (Yorkshire & Cumbria)
3. Vale of Pickering (Yorkshire)
4. Vale of York (Yorkshire)



5. Southern Lincolnshire Edge (Lincolnshire)
6. Trent and Belvoir Vales (the most significant of these by size, in Nottinghamshire and Lincolnshire, part in Leicestershire)
7. Mersey Valley (between Manchester and Liverpool)
8. Berkshire and Marlborough Downs (Berkshire & Wiltshire)

## Farming and hedgerows

- The management of existing hedgerows is vital to the future of hedgerows around the country. When Environmental Stewardship (ES) or Countryside Stewardship (CS) management schemes were considered:
  - a. 64.2% of landscape areas had less than 20% of their hedgerows under ES or CS management schemes. The low percentage of hedgerows managed under these schemes is consistent with the research finding that only 20.8% of National Character Areas (NCA) have hedgerows in good condition;
  - b. 32 NCAs were found to have between 20–30% of their hedgerows in ES/CS schemes, while only 25 had more than 30% under such management. Locations in these last two categories provide a good opportunity for planting new hedgerows which are then likely to be managed through a favourable management scheme.
- The funding required via agri-environment schemes to deliver the 2037 government hedgerow target is between £636 million (including hedge planting and gapping up) and £735 million (including hedge planting, gapping up, coppicing and hedgelaying). The resources required to meet the hedgerow targets at NCA level were illustrated by three landscapes of different geographical area and size of hedgerow target. Taking the largest of these landscape areas as an example, South Norfolk and High Suffolk Claylands, the target of 1,070km of planted or restored hedgerow by 2037 would require between 13,740 and 21,230 person days of labour, £3.6 to £3.9 million of capital and be equivalent to between £14.1 and £16.3 million of agri-environment scheme funding.

## Potential land area and targets for hedgerows

- A broad range of 40–90% of the land area of most NCAs was potentially suitable for hedgerows and their creation, while in a few cases this proportion was as little as 20–30%. Taking these areas and the prioritisation into consideration, the indicative NCA-level 2037 hedgerow creation and restoration targets varied considerably, from near zero in the case of three island NCAs, to 1,583 km in the case of the South Suffolk and North Essex Claylands. The average potential for hedgerow creation or restoration around England to achieve the Environmental Improvement Plan target was 304km.



## Top five areas as potential % of land for hedge creation

- |   |   |
|---|---|
| 1. Mid Somerset Hills                       | 90.6% <sup>3</sup> (lower priority area)                |
| 2. South Norfolk and High Suffolk Claylands | 88.9% (11 <sup>th</sup> largest NCA, medium priority)   |
| 3. Yorkshire Wolds                          | 88.7% (8 <sup>th</sup> largest NCA, high priority area) |
| 4. Lincolnshire Wolds                       | 88.5% (high priority area)                              |
| 5. East Anglian Chalk                       | 88.3% (high priority area)                              |

## Top five areas with highest hedgerow target by km (by 2037)

- |  |   |
|--|---|
| 1. South Suffolk and North Essex Clayland                    | 1,583.24km (3rd largest NCA)              |
| 2. Severn and Avon Vales (Worcestershire, Gloucs to Bristol) | 1,533.39km (12 <sup>th</sup> largest NCA) |
| 3. Northern Thames Basin (Herts to Essex)                    | 1,429.12km (7th largest)                  |
| 4. Cotswolds (mainly Gloucs and Oxon)                        | 1,412.46km (4th largest NCA)              |
| 5. Shropshire, Cheshire and Staffordshire Plain              | 1,367.77km (2nd largest NCA)              |

## Environmental value

- The ecosystem benefits of hedgerows were assessed for all landscape areas, which were then used to inform the further targeting of hedgerow planting and restoration. The top 5 ecosystem services described in the NCA profiles are as follows<sup>4</sup>:

1. Reducing water pollution (72%)
2. Improved soil quality and reduced erosion (63%)
3. Climate regulation (45%)
4. Managing water flow (38%)
5. Biodiversity (38%)

10 different ecosystem services that hedgerows provide were included in these descriptions; the most common service was mitigation of water pollution. Hedgerows have an important role in helping to reduce flooding and slowing the flow of water across land. Habitat and connectivity for biodiversity is an important characteristic of sympathetically managed hedgerows, and this can also generate functional and economic benefits for farmers.

## Examples of best practice

Six case studies have been gathered by ORC to aid a better understanding of the challenges that arise from delivering projects to plant and restore hedgerows and explore the potential solutions to consider in response. The six case studies illustrate best practice on how to deliver successful hedgerow projects. The six case studies cover a wide geographical spread across England, ranging from north to south of the

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<sup>3</sup> Noted as an 'outlier' as lower priority for hedgerow intervention as has retained hedgerow cover and good hedge condition

<sup>4</sup> 156 out of 159 National Character Area profiles mentioned the ecosystem services of hedgerows.



country, spanning rural, semi-urban and urban environments and with support through agri-environment scheme (AES) funding and grassroots community involvement. This helped to understand the sometimes overlooked on-the-ground challenges and also opportunities for delivering hedgerow targets. An overview of each case study can be found in Table 1.

Table 1: Overview of case studies

National Character Area	Characteristics	Organisation lead	Funding	Hedgerow change
South Devon	deep rural, protected, southern, low hedgerow priority score, high existing hedgerow cover	South Devon National Landscape	Farming in Protected Landscapes (FiPL)/Countryside Stewardship	Six FiPL projects create 1.47km hedge bank
South Hampshire Lowlands	deep rural, unprotected, southern, medium hedgerow priority score, low existing hedgerow cover	CPRE Hampshire	External funding	In 2023/24, over 5km of hedgerow has been planted, over 5km laid by volunteers & hedgelaying trainees
Howardian Hills	deep rural, protected, northern, medium hedgerow priority score, medium existing hedgerow cover	Howardian Hills National Landscape	Farming in Protected Landscapes	Hedgerow management is viewed as important in the area as new hedgerow planting/rejuvenation
Arden (Solihull)	urban fringe, unprotected, midlands, medium hedgerow priority score, high existing hedgerow cover	Solihull Metropolitan Borough Council	Free tree scheme funding stems from Birmingham Airport expansion, contracted carbon offsetting budget	In 2022, 1.74km of hedgerow was planted across several projects, by community groups, schools and landowners
South Suffolk and North Essex Clayland	deep rural, protected, east England, medium	CPRE & Stour Valley Farming Cluster	External funding, now secured Defra Landscape Recovery	In 2022/23, the farmer Cluster planted 7.65km hedgerow, gapped



	hedgerow priority score, medium existing hedgerow cover		Project funding for next two years	1.18km, coppiced 2km and laid 1km
<b>Manchester Conurbation</b>	urban, unprotected, northern, medium hedgerow priority score, low existing hedgerow cover	The Orchard Project	Greater Manchester Environment Fund (created by county Wildlife Trust and local Combined Authority)	50m of partly edible mixed hedgerow on one site with more planned

AES funding has a critical role to play in the future of hedgerows which is demonstrated through Farming in Protected Landscapes (FiPL) initiatives in South Devon and the Howardian Hills of North Yorkshire. However, so do NGO-led multi-year programmes, such as Hedgerow Hero projects in Hampshire and Suffolk and The Orchard Project in Manchester, which successfully mobilise a large volunteer workforce. Delivering hedgerow projects on many small sites can be a challenge to coordinate. The Solihull Council-led Arden Free Tree Scheme experienced similar issues, but ultimately reached a broad range of stakeholders with many social, environmental and economic benefits.

## Conclusion

Delivery of the hedgerow target in the Environmental Improvement Plan is both a challenge and an opportunity to create a brighter future for England's hedgerows. The research for CPRE, by the Organic Research Centre has revealed where hedgerow action could be prioritised around the country, which includes 25% of landscape areas that scored as highest priority. There will be opportunities for hedgerows to be improved in urban, rural and suburban landscapes. The NCA level indicative hedgerow targets offer a framework for the government to utilise and identify how and where the EIP target can be achieved. Based on the findings of the research, we make these recommendations to help ensure achievement of the national hedgerow targets:

## Recommendations

### Government should:

1. Target where action is needed to best deliver the national hedgerow targets in Defra's promised national land use framework. Refine the spatial prioritisation presented in this report with





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updated Countryside Survey and UKCEH Land Cover Plus hedgerow 2016–2021 data on current hedgerow extent;

2. Develop a system for monitoring progress towards the 2037 and 2050 hedgerow targets, encompassing the quality as well as quantity of delivery. Attention to sufficient aftercare of recently planted hedges is needed;
3. Make access to government funding opportunities as straightforward as possible to ensure a high uptake of these offers.
4. Address continuing systemic threats to hedgerows through policy support and knowledge exchange, to mitigate and remove ongoing biological, ecological and cultural barriers to achieving Favourable Conservation Status of England's hedgerow network.

### At the local level:

5. Use this indicative target-setting approach to initiate discussion with local stakeholders on local ambition for hedgerows and the means to more finely tune spatial prioritisation of hedgerow action, including through emerging Local Nature Recovery Strategies;
6. Facilitate aggregated approaches (for example through farm clusters) that reduce the administrative overheads of hedgerow action, including access to grant funding;
7. Continue to raise awareness of the many values of hedgerows to urban and rural populations. Those values depend largely on the local environmental and societal context, and in this respect not all hedgerows are equal. Identifying the contributions that hedgerows can make in different parts of a rural landscape or city/townscape can help in targeting and developing support for hedgerow action;
8. Design the right hedge for the right situation, considering the species composition and structure needed to meet the identified local needs and confer long-term resilience to climate change. Address continuing systemic threats to hedgerows through policy support and knowledge exchange, to mitigate and remove ongoing biological, ecological and cultural barriers to achieving Favourable Conservation Status of England's hedgerow network.