

Hedge fund:

investing in hedgerows for climate,
nature and the economy

Executive summary and recommendations

September 2021



Research undertaken independently by

 **ORGANIC**
RESEARCH CENTRE



The
countryside
charity

Foreword



Lord Deben,
Chair, Climate Change Committee

I am looking over the fields outside my window and this is the first year that the hedgerows we have put back have begun to come to fruition. The countryside over which we look is now exactly as it was in 1850 before the hedges and trees were pulled out to make our pasture land into large arable fields. The destruction was not a wicked plot but a determination to make land more productive in order to feed our people during and after the war. Spurred on by Deficiency Payments and the Common Agricultural Policy, our yields rose and our wildlife diminished. As so often we overdid it – ignorant and careless of the effects it was having.

Since then, there has been a growing revolt as farmers and landowners, environmentalists and country people in general have begun to recognise how we have diminished the natural world and threatened species of every kind from mammals and birds to reptiles and insects. CPRE, the countryside charity's timely report concentrates upon the hedgerow and its pivotal role in habitat creation, soil protection, and the sheer beauty of the countryside. Reintroduction and proper maintenance of hedgerows transforms the all too sterile prairie land into the countryside, which for long we have loved. But, as this report shows, this is not about romance – the hard facts are that hedges contribute to profit as well as to wellbeing and CPRE is to be congratulated in putting the record straight.



Executive summary and recommendations

One of the best ways to simultaneously tackle the climate crisis, boost nature and grow our economy is by restoring and increasing the UK's hedgerow network. Not only do hedgerows complement and enhance the unique character of our beautiful countryside, they are a haven for nature, remove carbon from the atmosphere and support sustainable local economies. But, shockingly, we have lost 50% of our hedgerows since the Second World War and they are still in decline.

The Climate Change Committee (CCC) recommends that the extent of our hedgerow network should be increased by 40% to support the UK government's goal of net-zero carbon emissions by 2050. In this research, commissioned by CPRE, the countryside charity, and undertaken independently by the Organic Research Centre (cpre.org.uk/ORC21), we provide an evidence-based overview of the impact of 40% more hedgerows for nature, climate and the economy. We then make recommendations on how the government, local authorities, farmers and land managers can maximise the potential of the humble hedgerow.

What's a hedgerow?

A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less than 20m wide. Any bank, wall, ditch or tree within 2m of the centre of the hedgerow is considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow. Species-rich hedgerows contain five or more native woody species on average in a 30m length.



Economy

The analysis carried out for this report indicates that for every £1 spent on hedgerows, a return of as much as £3.92 can be expected as a result of some key ecosystem services and economic activities associated with hedgerows.

These include biodiversity enhancement, carbon sequestration and small-scale woodchip production, for local and domestic biofuel. The positive cost-benefit ratio suggests a compelling argument in favour of increasing the current hedgerow network in the UK. It is important to acknowledge that the nature of the costs and benefits are closely dependent on the location and management regime of hedgerows. It's also important to note that the benefits are expected to be even higher than this, as the value of £3.92 does not include the ecosystem services of water regulation and air pollution reduction – these were evaluated using a different approach and could not be aggregated in the composite figure.

Biodiversity

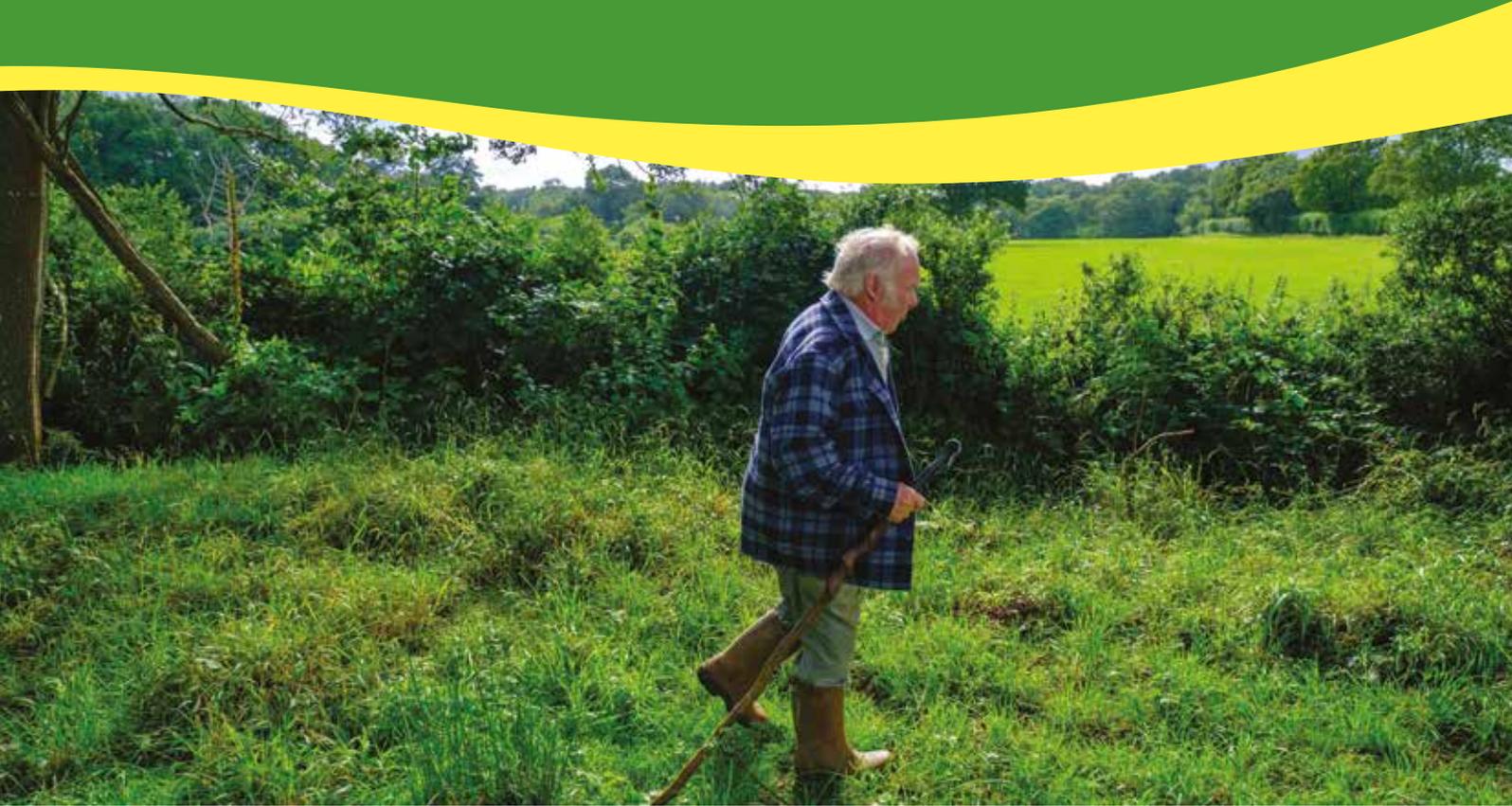
In its expanse, the hedgerow network is our largest 'nature reserve'. Just as our capillaries branch and penetrate the body to supply all cells with food and oxygen, the UK's hedgerow network must remain healthy in order to branch and spread deep across our countryside and supply every village, town, city and rural area with the ecosystem services they

need. Healthy hedgerows are teeming with life and vital for nature – of the 1,149 UK priority species, 130 are significantly associated with hedgerows. These include the charismatic hazel dormouse, the much-loved hedgehog, whose decline has been closely associated with hedgerow loss, and the brown hairstreak butterfly, which lays its eggs on blackthorn and is particularly common in hedgerows. Many of these species have a key role to play in pollinating crops and as natural predators for crop pests. It is clear that continued hedgerow loss will hasten the decline of these species. Increasing the hedgerow network will aid their recovery.

Climate change

With a significant amount of carbon sequestration on farms attributable to hedgerows, the role of UK hedgerows should not be undervalued in international efforts to mitigate climate change.

Indeed, the restoration and planting of new hedgerows will be an important part of the UK's international obligations to reduce national emissions by 80% before 2050. There is huge scope to increase the overall carbon sequestration and storage of UK hedgerows by allowing our hedgerows to become wider and taller. An ORC field study found that **a hectare of hedgerows between 3.5m and 6m wide could sequester as much as 131.5 tonnes of carbon per year.**



Air quality

Urban trees are commonplace as they are seen as a good tool for cleaning our air by filtering out pollutants, providing cooling shade and boosting biodiversity. But evidence indicates that hedgerows are superior to trees in urban street pollution management in ‘canyon’ streets, or ‘high sided’ streets — that is, streets with tall buildings. Unlike trees, when hedgerows are planted between public walkways and traffic, they do not constrain air flow. In cities hedgerows also act as a superior local barrier to airborne pollution because of their low and dense foliage. In open roads, again, hedgerows have their foliage at the correct height to act as a barrier to pollution whereas other greenery, such as trees, do not. Hedgerows can even block noise pollution from busy roads. These clear benefits would suggest that hedgerows, not just trees, should be the default solution for urban roadside pollution and noise control.

Cultural services, public health and wellbeing

Hedgerows are the vital stitching in the patchwork quilt of the country, lending beauty and character to the landscape. They provide tangible signs of the changing seasons, while at the same time giving a strong sense of continuity. They also

make a significant contribution to local distinctiveness and a sense of place.

This report finds hedgerows to be a key component of public appreciation for the outdoors and enjoyment of rural landscapes. With most people spending between £1 and £3.50 on every outdoor recreational visit, the contribution of hedgerows towards regional economies should not be overlooked. There is substantial evidence to suggest the increased presence of green features in urban landscapes could have benefits to public wellbeing and enjoyment of outdoor urban space – and urban hedgerows account for around 10% of the nation’s hedgerows.

Water and flooding

Flooding and soil erosion cause substantive costs to society. It is clear that planting hedgerows in some areas represents a valuable policy option to reduce the risk and damages of flooding events in the UK, which are being increasingly exacerbated by the climate emergency. Hedgerows also contribute to preventing soil erosion and nutrient loss, keeping our landscapes happy and healthy.

Jobs and growth

40%

more hedgerows would result in

over 25,000

more jobs over a
30-year period for
hedgerow planting
and maintenance

For every £1 invested in hedgerows,
as much as

£3.92

could be returned to the wider economy when
the right hedgerows are planted in the right place

Recommendations

In order to achieve a 40% increase in the extent of the UK's hedgerows by 2050, CPRE, the countryside charity is making the following recommendations.

The government should:

1. Set a target to increase the hedgerow network by 40% by 2050 with extended protection under the Hedgerows Regulations to cover more existing hedgerows.
2. Design and deliver an environmental land management scheme (ELMS) that makes healthy hedgerows an attractive option for the agricultural sector.

Local authorities should:

3. Develop policies in local plans to ensure that hedgerow planting is integrated in new developments and that any damage to existing hedgerows is avoided (biodiversity net gain should never justify the removal of important hedgerows).
4. Work with local community groups to plant hedgerows in urban, and urban fringe (including Green Belt) areas, enhancing green infrastructure and directing funding to help deliver Local Nature Recovery Strategies.

Farmers and land managers should:

5. Maximise the environmental benefits of hedgerows by allowing them to grow taller and wider and ensuring flowering plants are allowed to grow around hedgerows at the field margin.
6. Maximise the biodiversity benefits of hedgerows by ensuring that no more than half of a hedgerow is ever coppiced for wood fuel and no more than 5% is coppiced in any year.

CPRE, the countryside charity, will:

7. Commission research into locations that could help achieve a 40% increase in the hedgerow network (through new planting and restoration), in a way that enhances and reinforces landscape character and delivers the maximum benefits for communities.

Next steps

If you would like to work with CPRE, the countryside charity on our campaign for 40% more hedgerows by 2050, please contact externalaffairs@cpre.org.uk

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