

Swift and wild

How to build houses and restore nature together





ngland is amid interlinked nature and climate emergencies, whilst suffering both housing and public health crises. We need to build – and with the right approach: the right development, in the right places and with nature at its heart - the planning system can help us address each of these areas. whilst ensuring one doesn't cost another.

The English planning system has been in place for over 70 years . Like any long-running system, it needs to be reviewed and updated, and over recent years it has seen several small tweaks via both legislation and policy changes. However, further changes are needed so that development helps to tackle the interlinked nature and climate crises.

It is widely recognised that nature is vital to us all – for the food we eat, the water we drink, the air we breathe and the space we need to feel secure, happy and healthy. Nature is also the best tool in our toolbox to mitigate and adapt to climate change and support communities and land managers (including farmers) to be resilient to extreme weather.

Recent research has demonstrated nature's importance to economic growth; studies show damage to the environment is slowing UK growth, undermining prosperity¹, and could lead to an estimated 12% reduction in GDP^2 – a measure of the size of the economy. Protecting and recovering nature makes sense – for the environment, for communities and the economy.

Traditionally new development has been a threat to nature and, more often than not, contributed to stark declines in wildlife across the UK, with one in seven species now at risk of extinction³.

But this does not have to be the case.

When nature's recovery is designed into the planning system, development can work in harmony and contribute to net gains for wildlife. And it is not just wildlife that benefits when nature is embedded in the planning system in a meaningful way. It should also:

- Address the housing crisis and help UK Government meet net zero faster;
- Reduce bills and the cost of development overall;
- Make everyone's lives wilder and improve the health and wellbeing of communities.

With the UK Government legally bound to reach targets to halt the decline in nature by 2030 and to

reach net zero by at least 2050, as well as international commitments to meet under the Global Biodiversity Framework, action must be progressed quickly.

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Updates to planning and policy to ensure a holistic and strategic approach can actively support efforts to address the housing and health crises, whilst helping to meet net zero commitments and deliver nature's recovery.

October 2024

Homes fit for the future

Our homes and buildings are one of the UK's top sources of carbon emissions, with the building sector accounting for around a fifth of UK greenhouse gas emissions⁴. Whilst the greenest energy is that which is not needed, over the past 12 months, the sector has seen delays in UK Government commitments to improve energy efficiency, insulate homes and phase out carbon producing gas boilers. This means that just 10% of the emission reductions required for the heat and buildings sector are covered in confirmed policy⁵.

80% of the homes likely to be standing in 2050 – the year by which the UK Government must have achieved net zero – have already been built. This means a concerted effort is required to retrofit measures into existing homes and buildings

Improving energy use and energy efficiency in homes and buildings is a win-win for communities and for climate. Inexpensive, small-scale changes can also help bring back wildlife into spaces around our homes, including windowsills, balconies and gardens.

It is time to prioritise homes that deliver for people, wildlife

while also ensuring new homes and and climate. buildings are fit for the future.



1. Making use of roof space Solar panels generate zerocarbon energy helping to reduce energy bills⁶. Green roofs can also be installed to benefit wildlife and help reduce air temperature and water runoff in built up areas.

2. Rainwater harvesting Connecting water butts to downpipes or installing other rainwater harvesting features allows for rainwater use, reducing demands on rivers.

3. Installing bird and bat bricks Specially designed bricks can be installed into new housing

or retrofitted to provide homes for nesting birds, such as swifts, and roosting bats.

4. Improving energy efficiency Well-insulating walls and windows maximises energy efficiency within a home, reducing the energy used and therefore energy bills7.

5. Keeping cool in summer Passive cooling features including shading and convection systems help keep homes cool in summer without requiring any power and helps increase resilience to climate change.

6. Recovering heat Ventilation with heat recovery technology can help to improve indoor air quality and reduce bills, by reducing heat loss.

7. Fitting timber frames Using wooden frames reduces the need for blockwork in new buildings, reducing the carbon footprint as the blocks require lots of energy to produce.

8. Installing a heat pump Air source heat pumps provide efficient heating in well-insulated houses, reducing carbon emissions and heating bills.

9. Creating sustainable drainage Gutter-fed ponds and other larger drainage systems installed in gardens and on streets can help buffer the effects of flooding and provide habitat for wildlife.

10. Including nature features Nature-inclusive design of outdoor spaces can bring wildlife to windowsills, doorsteps and gardens, improving physical and mental well-being and providing habitat for wildlife.

Case study

Low-carbon social holes delivering for people and nature in Norwich

Residents of the award-winning social housing development designed by Mikhail Riches Architects for Norwich City Council have seen the benefits of high environmental standards. The 105 homes are not only built using low carbon materials including timber, they are also equipped with a passive solar scheme to help them stay warm in winter and cool in summer, which when combined with high insultation (from recycled cellulose) means that they meet PassivHaus standards.

Energy bills in PassivHaus homes are 62% lower than the average home. As well as financial benefits, health benefits have also been reported, with one resident noting "I've reduced some of my medication since coming here. Our previous flat had damp issues... here we can dry clothes indoors in a day with no heating on"⁸.

PassivHaus is a design standard that aims to deliver net-zero buildings.



PassivHaus development can increase living standards, whilst reducing the environmental impact of the average home

The design of the development has also sought to foster a sense of community. There are shared spaces for residents to meet, relax and play safely, and a wildflower meadow and street trees helping to connect people with nature. Every house has a garden and every flat a balcony, providing residents with their own private growing spaces. The scheme sought to integrate biodiversity features into the design of homes, including bird and bat boxes.

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Creating communities rich in nature

Integrating nature into new developments is proven to have a whole range of benefits, from reducing flood risk and air pollution, to providing local opportunities to grow food and foster a sense of community. Evidence also shows that people with nature on their doorstep are more active, mentally resilient and have better all-round health⁹. Sometimes referred to as natural capital, the value of these benefits in England was estimated by the UK Government's Natural Capital Accounts¹⁰ to be £35.7 billion in 2020, £5.5 billion of which was associated with health benefits.

Yet despite these documented benefits, in England just 35% of households with annual incomes below £10,000 are within a 10-minute walk of a publicly accessible natural green space; creating a disparity that has knock on effects on health and well-being outcomes¹¹. These health inequalities and the role of publicly accessible natural green spaces in helping to tackle them has been recognised in the UK Government's Loneliness Strategy¹² and the 'Marmot Review', Fair Society, Healthy Lives.¹³

Healthy community spaces delivering for nature and climate

1. Creating shade Urban trees help cool the air in summer and improve air quality, whilst providing habitat for wildlife.

2. Maintaining natural habitat Trees, hedgerows and other habitats weaved through developments provide space for nature, help to reduce flood risk and keep urban areas cool in the summer.

3. Pollinator-friendly spaces Wildflower verges along roads and in formal open spaces help support vital pollinating insects.

4. Sympathetic lighting Street and home lighting installed that avoids disturbing wildlife. 5. Wildlife-friendly planting and local food growing Wildlife-friendly boundaries between gardens and open spaces, that use native plants that support local wildlife and boost biodiversity, as well as space for residents to grow their own food.

6. Creating 'green routes' Wheelchair and buggy accessible, and attractive pedestrian and cycle routes for active travel and providing connections to public transport with aligned timetables. Active travel is good for mental well-being and reduces the risk of obesity, Type 2 diabetes, cardiovascular disease and musculoskeletal disease. 7. Designating 'wildbelts' Safeguarding local wild space that weaves through towns and cities that is easily accessible and where local communities can help bring nature back.

8. Deadwood habitat Deadwood piles or bug hotels in communal spaces that creates habitat for insects and small mammals like hedgehogs.

9. Accessible nature Connecting developments with local nature reserves on the edges of towns and communities, to ensure accessible green and blue spaces – with everyone within a 15-minute walk or wheel – and a core area for wildlife. 10. Community-owned renewable energy Community-owned ventures that provide clean energy, brings energy production closer to home reducing the need for transmission infrastructure and provides a community benefit fund.

11. Affordable homes Indistinguishable from market homes, new developments prioritise meeting the need for social homes, helping to create thriving communities and saving public money in the long run¹⁴.

ILLUSTRATION BY NIK POLLARD



Green Belt

Commonly misunderstood. green belt land is not specifically protected for its value to wildlife. It is designated to:

- Prevent urban sprawl • Protect the countryside
- Protect the character of
- historic towns • Prevent towns and
- village merging into each other • Encourage urban
- regeneration.

Jargon Buster

Grey Belt

This is a new term described by UK Government as land within designated green belts that comprise brownfield land and areas that make a limited contribution to the five purposes listed above.

Brownfield land

This is land that has been previously developed on. It is important to reuse suitable brownfield land that has little environmental value. but many brownfield sites are important for nature and should be protected.

Wildbelt

A Wildbelt would put nature at the heart of planning and protect land currently of low biodiversity value, but with potential for nature's recovery, from development, securing benefits and long-term investment for the public. A Wildbelt would also support local planning authorities to implement biodiversity duties and support Local Nature **Recovery Strategies.**

Case study

House-building helping to make space for nature in London

Kidbrooke Village in London is an example of a development making space for nature. With and 35 hectares of varied, semineighbours and wildlife to enjoy, it

of the site is Cator Park, designed as a green corridor for people and wildlife - a natural area weaving between the new residential blocks. There will be play areas bordered by species-rich grassland, heather and copses of trees, a chalk stream meandering beside open lawns, between high-rise buildings. These green spaces provide habitat for

birds, bees and other wildlife, as well as helping with local flood mitigation and water management, and providing places for the local community to spend outside. These new habitats also connect to a wider network of green the site, such as the wetlands of Sutcliffe



Infrastructure improvements can go hand in hand with biodiversity mitigation

Case study

A Community Interest Company delivering green energy projects with local people

Wiltshire Wildlife Community Energy (WWCE) is a not-for-profit Community Interest Company, established in 2013 by Wiltshire Wildlife Trust. Now a separate entity, it aims to promote wildlife whilst reducing carbon emissions in the county and operates with an independent board on which Wiltshire Wildlife Trust has representation.

To date, WWCE has facilitated three rooftop solar arrays and two solar farms at Braydon Manor Farm and at Chelworth Industrial Estate, producing a total of 6MW – enough energy to power 2,000 homes. Working closely with Wiltshire Wildlife Trust, the solar developments are designed to benefit wildlife too. During the construction of Chelworth Solar Farm, on land leased from Wiltshire Wildlife Trust and neighbouring Blakehill Farm Nature Reserve, new ponds were created providing a home for great crested newts, blackthorn hedgerows were planted for brown hairstreak butterflies and hibernacula installed for reptiles. The grassland within the solar farm is also being managed with wildlife in mind, expanding the area managed for nature. Considering how the habitats are managed from the outset – rather than land management needing to adapt to the presence of solar panels - make it easier to maximise the benefits for wildlife. For example, ensuring the site margins provide good wildlife habitat and that the spacing between solar panels is big enough to enable the right machinery to support management tasks. Developing the appropriate sheep grazing regime in a predominantly cattle grazed

landscape was another factor that

needed to be addressed in order to allow the grassland to develop good biodiversity.

In addition to supporting nature and climate, WWCE are working closely with the local community and reinvests surplus income into a whole range of community projects to support wildlife and reduce carbon emissions – from toad patrols to cycling networks. WWCE also shares a Carbon Reduction Champion, and associated costs of this role, with Wiltshire Wildlife Trust, enabling both organisations to support work to reduce carbon. At WWCE this includes working with local communities to help low-income households across the county by raising awareness of and access to energy efficiency measures. At Wiltshire Wildlife Trust this fund works to calculate annual carbon emissions and ways to reduce them.



Taking a country-wide strategic approach

Tackling the nature, climate, health and housing crises in conjunction means thinking ahead about how land is used. This means strategic planning is essential to balance the competing demands on land and at sea. This will enable the UK Government to meet its international commitments such as the Global Biodiversity Framework, as well as its own legally binding targets that it has made on the natural environment and climate change, whilst ensuring that society has the food, housing, business, transport, energy and water infrastructure it needs.

Strategic spatial planning should ensure:

- The avoidance of harm to all legally protected sites (including Marine Protected Areas, Sites of Special Scientific Interest, Special Areas of Conservation and Special Protected Areas), Local Wildlife Sites and irreplaceable habitats, removing the need for costly and unproven compensation.
- Wildbelt land for nature's recovery is protected so that wildlife has the space to recover.
- There is cooperation across local boundaries resulting in a joinedup approach, and that land and sea use planning processes work together.
- High-quality ecological data informs decision making in the development of strategic plans, enabling early identification of issues to avoid delays later on.
- Site-level surveys allow for wildlife impacts to be considered in development decisions.
- Communities and local stakeholders are empowered to engage in the planning system, allowing local knowledge to be employed in shaping development, as well as early identification of any issues, in turn helping to increase

community support for new development.

 Investment in green jobs and skills provide the environmental and ecological skills needed to plan for the future.

The Global Biodiversity Framework

The Global Biodiversity Framework is an international agreement that aims to reverse the loss of wildlife and promote sustainable use of nature. It was adopted by 196 countries, including the UK, at the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity in December 2022. One of the key targets within this framework is around spatial planning to reduce nature loss. Strategic spatial planning is essential to balance competing demands on land and at sea.



Case study

Tackling nutrient neutrality through strategic planning

Nutrient pollution is damaging some of England's most important habitats with birds, fish and invertebrate populations in steep decline in impacted areas.

Under rules that prevent further pollution – the Habitats Regulations – developers are required to show how their schemes will prevent the release of additional nutrients to these key habitats. However, these nutrient neutrality rules have been criticised for holding up housebuilding. The Wildlife Trusts believe that a more strategic approach to mitigating pollution impacts could deliver greater benefits for nature than the current case-by-case system.

In a strategic approach, developers pay a fixed rate, with contributions collected together from more than one housing development. This money is then invested in projects that reduce pollution.

Why does a strategic solution work for nutrients?

- It ensures the continued protection of sensitive habitats.
- The pooling of contributions enables the fix to be delivered and more impactful for nature.
- Schemes that reduce pollution need to be in place before the impacts occur ensuring the situation does not get worse.

Sustainable development can help tackle the nature and climate crises and prevent disasters, such as flooding

strategically, this is cost effective

- Different stakeholders have worked together to find solutions.
- It complements efforts to reduce the underlying nutrient pollution load.
- The pollution from new homes and the pollution savings from conservation actions can be (relatively) easily measured

Right across England, Wildlife Trusts have been working with councils, developers, land owners and Natural England to find strategic solutions that enable housebuilding to go ahead in a way that does not exacerbate pollution, including the examples on the following page.



Case study

Unlocking planning and delivering for nature in the Tees Valley

In the Tees Valley, Durham Wildlife Trust has secured 636 acres of land in one of Natural England's priority nutrient mitigation catchments, with land acquisition funded by its nutrient neutrality scheme. The land will help realise the Wildlife Trust's vision for a Great North Fen, delivering for nature and ensuring that development in the area does not contribute to yet more water pollution¹⁵. As such, mitigation in the Tees catchment has delivered greater benefits for developers by streamlining and speeding up the gaining of planning permission, and greater benefits for nature by ensuring that mitigation sites deliver wildlife benefit on top of the water pollution protections they provide.

Case study

Bringing back wildlife in Dorset

Dorset Wildlife Trust's 420-acre Wild Woodbury site was purchased with support of grants from Bournemouth, Christchurch & Poole Council and Dorset Council¹⁶, to mitigate the impacts of increases in nitrates due to a new housing development in the Poole Harbour catchment. This has meant that 2,111 much needed homes could be built and in the three years since taking on the site, Wild Woodbury has been allowed to naturally regenerate and rewet, which has substantially reduced water pollution. Over 1,900 species have now been recorded on the site, including 29 Red List birds of conservation concern, 12 of which have been confirmed to be breeding at Wild Woodbury.

Case study

Reducing nitrate pollution on the River Solent

Two nutrient mitigation sites owned by Hampshire and Isle of Wight Wildlife Trust have been part of unlocking housebuilding. These two active schemes have secured 181 hectares of land to help reverse wildlife decline, enable the avoidance of over 3.75 tonnes of nitrogen entering the Solent catchment each year and mitigate for the impacts of 4,000 homes. The first site was achieved with private loan finance, and the second with both private and government loan finance via the Solent Local Enterprise Partnership. A Community Interest Company delivering green energy projects with local people

Bringing back

wildlife in Dorset

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Conclusion

Holistic, strategic, wellconsidered planning policy and legislation can actively support efforts to address the housing crisis, and the health crisis. to meet net zero commitments and can deliver on nature's recovery.

We need a planning system that:

Has nature at its heart and takes a strategic approach to land use. To achieve this, Local Nature Recovery Strategies will be key, with a new Wildbelt designation enabling the protection of land that is needed for nature's recovery. All development should contribute to nature's recovery through ambitious and effective Biodiversity Net Gain.

Maintains and improves **protections** for our most important sites for wildlife. Legislation and policy has been put in place for a purpose. The mitigation hierarchy, and the avoidance of harm in the first place, must be followed in the creation of plans and design of new development.

Empowers local communities and stakeholders to engage in the planning system and incorporates

high-quality ecological data and an effective process of environmental assessment. Early engagement with ecologists can enable winwins to be identified at an early stage of development design and communities are more likely to support projects where they have had a genuine say.

Identifies and implements win-wins for nature, people and climate. This includes ensuring access to

natural green spaces and achieving maximum energy and water efficiency. Development planned with nature in mind can help to address the nature and climate crisis, and support the health, wellbeing and vitality of communities. The Wildlife Trusts have identified a number of these win-wins. that the UK Government can implement quickly to achieve their objectives for development and support nature's recovery:

- Recognise and protect 1. Local Wildlife Sites in the planning system.
- 2. Avoid building on protected sites (and thus avoid need to do costly compensation).
- 3. Plan for nature's recovery by introducing a new designation -Wildbelt – and publish guidance for Local Planning Authorities on how to take account of Local Nature Recovery Strategies in planning.
- 4. Update and improve the Future Homes Standard and building regulations to deliver high quality, energy efficient homes and enable households to live in climate-resilient homes with cheaper energy bills.
- 5. Set as a requirement, small-scale nature interventions including bat, bird and bee bricks, and ban plastic grass on new housing developments.
- 6. Embed nature's recovery into strategic planning for homes and energy production/usage, by integrating a nature recovery objective into the remit of GB Energy and the Crown Estate.

Mitigation heirarchy: the starting point for any development

If a proposed development is going to badly harm nature, it should be moved to a site where inflicted by a development must be adequately mitigated for - and as a last resort, compensated for elsewhere.

All development should deliver a net gain for nature.

1. AVOID

Prevent damage to nature by locating developments in the right place and ensuring good early design.

2. MITIGATE

Minimise nature loss, integrate new habitat into the design of the development and use best practice to reduce construction impacts.

3. COMPENSATE

As a last resort, compensate for the remaining impacts of the development.

FOR ALL DEVELOPMENTS **BIODIVERSITY NET GAIN**

Net gain must be additional to steps 1-3, only used once the impacts have first been avoided, mitigated and compensated. All development must enhance biodiversity, even where no damage to nature occurs.

References

- 1. Final Report The Economics of Biodiversity: The Dasgupta Review |GOV.UK – via: https://www.gov. uk/government/publications/ final-report-the-economics-ofbiodiversity-the-dasgupta-review
- 2. Nature degradation could cause a 12% loss to UK GDP | Environmental Change Institute via: https://www.eci.ox.ac.uk/news/ nature-degradation-could-cause-12-loss-uk-gdp
- 3. State of Nature 2023 report on the UK's current biodiversity - via: https://stateofnature.org.uk/
- 4. Progress in reducing emissions 2024 Report to Parliament | The Climate Change Commitee. Table 1.1 = Buildings account for 81MtCO2e 1990-2022; total emissions 433 MtCO2e = 19% - via: https://www.theccc.org. uk/publication/progress-inreducing-emissions-2024-reportto-parliament/
- 5. Net Zero Policy Tracker (March 2024) | Green Alliance – via: https:// green-alliance.org.uk/wp-content/ uploads/2024/01/Net-Zero-Policy-Tracker-March-2024.pdf
- 6. The Value of New Build Solar | Solar Energy UK - via: https:// solarenergyuk.org/resource/thevalue-of-new-build-solar/

- 7. Poll shows majority back key renewable measures on new builds | MCS Foundation - via: https://mcsfoundation.org.uk/ news/poll-shows-majority-backkey-renewable-measures-on-newbuilds/
- 8. Goldsmith Street Project Gallery | Passivhaus Trust – via: https:// www.passivhaustrust.org.uk/ projects/detail/?cId=101
- 9. A Natural Approach to Health Works | The Wildlife Trusts via: https://www.wildlifetrusts. org/nature-health-and-wildwellbeing#evidence
- 10. England natural capital accounts: 2023 | Office for National Statistics - via: https:// www.ons.gov.uk/economy/ environmentalaccounts/ bulletins/
- 11. Poorer people bear brunt of extreme heat in Europe, say Spanish researchers | The Guardian - via: https://www. theguardian.com/environment/ article/2024/aug/28/poorer-peoplebear-brunt-of-extreme-heat-ineurope-say-spanish-researchers
- 12. A connected society: A strategy for tackling loneliness – laying the foundations for change GOV.UK - via: https://assets. publishing.service.gov.uk/

media/5fb66cf98fa8f54aafb3c3 33/6.4882 DCMS Loneliness Strategy_web_Update_V2.pdf

- 13. Fair Society, Healthy Lives: The Marmot Review | Institute of Health Inquality - via: https:// www.instituteofhealthequity.org/ resources-reports/fair-societyhealthy-lives-the-marmot-review/ fair-society-healthy-lives-fullreport-pdf.pdf
- 14. Building post-pandemic prosperity: The economic and fiscal case for constructing 100,000 new council homes each year (September 2021) Pragmatix Advisory - via: https:// www.local.gov.uk/sites/default/ files/documents/2021-09-14%20 Arch%2C%20LGA%2C%20 NFA%20final%20report pdf.pdf
- 15. Teesside first area to benefit from new scheme to unlock development and drive nature recovery | GOV.UK - via: https:// www.gov.uk/government/news/ teesside-first-to-area-benefitfrom-new-scheme-to-unlockdevelopment-and-drive-naturerecovery
- 16. Wild Woodbury | Dorset Wildlife Trust – via: https://www. dorsetwildlifetrust.org.uk/whatwe-do/conservation-work-land/ wild-woodbury

The Wildlife Trusts are a federation of 47 charities, 46 individual Wildlife Trusts and a central charity, the Royal Society of Wildlife Trusts. Together we have more than 900,000 members, 39,000 volunteers and 3,600 staff across the UK. We share a vision of nature in recovery, with abundant, diverse wildlife and natural processes creating wilder landscapes where people and nature thrive.

Wildlife Trusts care for – and have restored – some of the most special places for wildlife in the UK. Collectively we manage more than 2,300 nature reserves, operate 123 visitor and education centres and own 29 working farms. We undertake research, we stand up for wildlife and wild places under threat, and we help people access nature.

We work with businesses who are committed to being nature positive and take action to help restore 30% of land and seas for nature by 2030.



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