

# Homes for people and wildlife

111

- How to build housing in a nature-friendly way -

Protecting Wildlife for the Future

Everyone deserves to live in a healthy, wildlife-rich natural world

#### Homes for people and wildlife: a vision for the future

The Government's ambition is for one million new homes to be built by the end of 2020, and a further half a million more by the end of 2022. It has also made a commitment to be the first generation to leave our environment in a better state than we found it. Some might argue that these are conflicting objectives, at a time when nature is in deep trouble. Over the past century we have lost natural habitats on an unprecedented scale. Yet contact with the natural world makes us feel good, and we depend on the things that it gives us.

This document sets out The Wildlife Trusts' vision for new homes that are inspiring and beautiful places to live, and where people and nature thrive together. To achieve this, we need a new approach that puts the natural environment at the heart of development and planning. The focus needs to move to *where* and *how* we build houses, not just how many we need to build. Imagine if the starting point for decisions about housing was to map our woods, meadows, parks and river corridors and identify where new habitats are needed; and then locate and design new housing around this. This is exactly what we need to do.

Our proposals are built on decades of experience of working with planners and housing developers. Not only do we engage very actively with local authority planning and decisions about their strategies, but we work with developers and policy-makers to get the best outcomes for wildlife. Every year, Wildlife Trusts influence thousands of planning applications so that they benefit both wildlife and people. We have influenced the design of new developments like Cambourne in Cambridgeshire and Woodberry Wetlands in London. We also provide expert advice to developers at all stages of planning and construction.



#### The challenge

More and more people live their lives with little or no contact with nature. This disconnect affects mental health, contributes to obesity and even has an impact on life expectancy. Integrating nature into the built environment can help to address these problems, but developments have often missed opportunities to make neighbourhoods more natural, and damaged what was already there.

We have lost 97% of our beautiful lowland meadows in England and Wales since 1930<sup>1</sup>. And the loss goes on. Recent reports show that over the last fifty years, 56% of our wild plants and animals have declined, and 15% are at risk of disappearing from our shores altogether<sup>2</sup>. Much of this loss has been due to intensive agriculture, but built development continues to be a major contributor – often unnecessarily. This has reduced the space left for wildlife and disrupted ecological processes such as natural floodwater storage in river floodplains. As farmland has become less hospitable to wildlife, so the importance of our urban natural areas has increased. Yet, in towns and cities, many gardens and small incidental natural spaces have been converted into buildings and hard standing - leading to creeping, but large-scale reductions in the naturalness of many urban landscapes.

Continuing development in this way, but on a bigger scale, is not sustainable for wildlife, wild places, the character of neighbourhoods and the people who live there.

But developments don't have to squeeze out wildlife. The benefits are clear: trees in urban areas improve the view, aid privacy, provide shade and help reduce pollution and flash flooding; community green spaces bring people together; and local parks and woods are valuable places for people to walk, play and unwind in.

#### The solution – Homes for people and wildlife

Built in the right way, in the right place, new housing developments can make a positive contribution to nature and to the health and wellbeing of people who live there. There are two stages to this:

**Location** - new housing should be located in areas that are already well served by infrastructure and should avoid harm to the existing environmental assets of an area. Housing should be targeted at places where it can have a positive environmental impact to help achieve landscape restoration and recovery. This requires an up-to-date and well-informed ecological network map, which identifies existing natural features and habitats, alongside areas where new habitats are needed to restore ecosystems and help wildlife recover.

**Design** – new housing developments and houses themselves should be designed to integrate space for both wildlife and people, as well as to reduce carbon emissions and minimise water usage.



#### What a good, nature-rich housing development looks like

A good nature-friendly development retains existing meadows, wetlands, hedgerows, trees and woods, and joins them up with wildlife-rich gardens, verges, amenity green space, cycle paths and walkways. The result is a network of natural green and blue corridors weaving through the development and beyond, into the surrounding urban or rural landscape and contributing to the wider ecological network.

This approach improves air quality, reduces surface water flooding and makes developments greener and more attractive places to live. Residents have easy access to safe, beautiful, natural spaces for exercise, play and social interaction. Wildlife becomes part of everyday life.



5

## Building with wildlife in mind

Housing developments can provide accessible natural areas close to people's homes, designed to complement the wider local landscape and linking up large, nature-rich open spaces with a network of green and blue corridors. Long-term, well-funded management of these wild, open spaces would provide an environment perfect for both people and wildlife. Features could include:

Permeable driveways to help reduce flood risk

- 2 Trees, hedgerows, water and other habitats integrated with development
- 3 Wildflower verges along roads and formal open spaces
- 4 Lighting designed to avoid disturbing wildlife
- 5 Sustainable urban drainage, swales and raingardens for wildlife and flood relief
- 6 Bat roosts, bird boxes and other wildlife features designed into buildings
- 7 Renewable energy and water efficiency built in from the outset
- 8 Safe, attractive, connected pedestrian and cycle routes
- 9 Features and corridors to help invertebrates, reptiles, hedgehogs and other mammals
- Wildlife-friendly green roofs and walls
- Native, wildlife-friendly plants of local origin used in gardens and landscaping
- 12 Wildlife-permeable boundaries between gardens and open space
- Allotments and community orchards for local food
  - Street trees for wildlife, shade and improved air quality
- Interpretation panels to help people understand the needs of wildlife and the environment





#### The benefits of housing for people and wildlife

Housing developments designed with environmental sensitivity and green infrastructure at their heart can deliver multiple social, environmental and economic benefits. Nature-rich housing can provide benefits for everyone – from developers to home-owners.

### Benefits for wildlife

- No loss of key wildlife sites Local Wildlife Sites and sites of national and international importance for wildlife should be protected, enhanced and well-managed as part of the development.
- Much more space for wildlife the development should generate additional funding and resources, for example Section 106 agreements and conservation covenants, to allow an overall increase in the abundance and diversity of wildlife by habitat creation and restoration, and an improvement of soil and river catchment health.
- Improved connectivity of wildlife habitats both within developments and linking to the wider landscape and ecological networks beyond.
- Buildings that are more wildlife-friendly with bird and bat boxes, pollinator and insect-friendly structures and connected spaces for hedgehogs.
- Reduced emissions reducing carbon emissions, pollutants and water use to help minimise environmental damage and threats to wildlife.

Benefits for residents

- Daily enjoyment of nature people can experience and benefit from the joy of wildlife and wild places in their daily lives, because there is wildlife around them near to home.
- Improved health accessible natural green spaces for fresh air, exercise and quiet contemplation improve health and wellbeing, for example by helping to lower levels of heart disease, obesity, stress and depression.
- Protection against extremes of climate natural green spaces and trees within urban areas help stabilise temperature and reduce pollution.
- Safer transport routes networks of natural green spaces can provide safe and attractive pedestrian and cycle routes.
- Sense of community natural green space in and around housing areas can provide a shared space for the local community to come together and socialise – reducing isolation<sup>3</sup>.

- Cost-effective environmental protection providing green space in and around housing is a cost-effective and sustainable way of increasing environmental resilience, for example by reducing surface water flooding<sup>4</sup> and improving air quality.
- Employment when communities get involved in the planning and management of the natural green space where they live, it can provide jobs, employment and volunteering opportunities.
- Space for local food networks of natural green space in and around housing areas provide opportunities to grow food and even, locally, keep bees.
- Attracting investment high quality developments rich in natural green space can attract further investment from business and visitors<sup>5</sup>.
- Reduced health-care costs people living in developments with more green space are likely to place fewer demands on the NHS, as they enjoy better health and a higher quality of life<sup>6.7,8,9</sup>.

#### Benefits for the economy & wider society

- **Satisfied customers** houses and developments set in natural green space are more desirable to buyers<sup>10,11</sup>.
- Higher market value houses in greener developments can have a higher market value<sup>10,11,12</sup>.
- Enhanced brand value developers that take a lead on nature build their brand, and change the attitudes of the sector as a whole.
- Improved high-calibre skills recruitment developers that show a genuine commitment to the environment are also more likely to attract up-and-coming graduates.
- Improved environmental performance higher ranking in sustainability and natural capital indices will build long-term value.
- Happier communities new houses designed to retain existing natural features with high quality greenspace are more acceptable to existing residents.

These multiple benefits are supported by a wealth of evidence (see references and bibliography). There are also some very good examples of new and existing developments that have already integrated wild places for wildlife and people into the design – examples can be found on The Wildlife Trusts website<sup>13</sup>.

Benefits for developers

#### What principles should guide the approach?

All housing developments must result in:

#### A measurable improvement for wild species and habitats, which means:

- Avoiding any loss or damage of wildlife sites - new housing must not damage or destroy important national and Local Wildlife Sites. Our natural environment is finite. These sites are remnants of a rich past and essential to our future.
- Designing in existing habitats new housing must work with as much existing habitat as possible. For example, retaining existing woods, copses, hedges and streams as integral parts of new developments, and enhancing and managing them.
- Creating new habitat habitat creation should be a standard feature of all new housing development, wherever it is.
- More than compensating for any habitat that is lost - where damage to existing habitats is unavoidable, mitigation must bring about an overall gain in habitats. This should be assessed objectively using an improved version of the Defra biodiversity metric.

#### All residents having lasting access to nearby nature, which means:

- Providing wildlife on the doorstep

   space for wildlife must be designed into new development, much of this should be easily accessible to people.
- Ensuring our natural spaces are well managed – maintaining local green spaces should be seen as just as essential as maintaining roads, power and other important infrastructure. Financial planning should account for this at the outset, through a service charge or capital endowment.
- Empowering communities for major housing developments provision should be made to empower the local residents to come together to maintain shared spaces, grow food and understand the area they live in.
- Engaging civil society local charities and social enterprises have skills and experience that will be vital to ongoing community engagement, and sustaining well-managed natural green space near to people.

#### This can be ensured by:

- Creating ecological network maps such maps should be built from local, up to date, data with the active involvement of civil society. They should be the basis for deciding where new housing is (and isn't) located, and how close it is to existing natural areas and wildlife habitats.
- Developing within environmental limits decisions about the planning, design and construction of new housing must be based on a thorough understanding of the natural environment's capacity to meet the demands placed on it.
- Using ecological expertise we would not try to run a health service without trained doctors and nurses, and we can't expect to sustainably manage our use of land, or build new developments, without trained ecologists and access to high quality environmental data.

#### **Bibliography**

- Davidson and Lawson (2006) Do attributes of the physical environment influence children's level of physical activity?
- DEFRA (2011) - Survey of public attitudes and behaviours towards the environment International Journal of Behavioural Nutrition and Physical Activity 3 (19): 1-17
- Landscape Institute (2013) Public Health and Landscape Creating Healthy Places
- Mental Health Foundation, London (2005) Up and running: Exercise therapy and the treatment of mild or moderate depression in primary care
- Mind (2007) Ecothery: the green agenda for mental health
- Play Wales (2015) Why playing matters and what we can all do about it
- Public Health England (2017) Spatial Planning for Health an evidence resource for planning and designing healthier places
- Simon Nicol, Mike Roys, Helen Garret Building Research Establishment Briefing Paper: The cost of poor Housing to the NHS
- UK Green Building Council (2016) Health and Well-Being in Homes
- University of Essex, School of Biology (2017) The health and well-being impacts of volunteering with The Wildlife Trusts (www.wildlifetrusts.org/living-landscape/naturehealth-and-wild-wellbeing)
- WHO (2016) Urban Green Spaces and Health a review of evidence
- WHO (2017) Urban Green Space Interventions and Health A review of impacts and effectiveness

#### References

- WFuller RM (1987) The changing extent and conservation interest of lowland grasslands in England and Wales a review of grassland surveys 1930 84. Biological Conservation 40: 281-300 Hayhow DB, et al (2016) State of Nature 2016. The State of Nature partnership. 1.
- Sullivan, Kuo and Depooter (2004) The fruit of urban nature: Vital neighbourhood space. Environment and Behaviour 36(5): 678-700 Duffy, Jefferies, Waddell, Shanks, Blackwood and Watkin (2008) A cost comparison of traditional drainage and SUDS in Scotland Water Science and Technology, 57(9), pp.1451-1459 Eftec, Sheffield Hallam University (2013) Green Infrastructure's contribution to economic growth: a review A Final Report for Defra and 3. 4.
- 5. Natural England July 2013
- UK National Ecosystem Assessment (2011) The UK National Ecosystem Assessment
- Public Open Space attributes and mental health in Perth, Western Australia. Social Science and Medicine 74: 1570–1577 De Vries S, Verheij, Groenewegen and Spreeuwenberg (2003) Environment and Planning 35: Natural Environments -healthy environments? 8.
- An exploratory analysis of the relationship between greenspace and health Natural England (2009) Our Natural Health Service: The role of the natural environment in maintaining healthy lives
- CABE Space (2006) Does money grow on trees Commission for Architecture and the Built Environment
   Landscape Institute (2014) Profitable Places why housebuilders invest in landscape
- Natural England, Northwest Regional Development Agency, Natural Economy Northwest (2008) The Economic value of Green Infrastructure
   http://www.wildlifetrusts.org/living-landscape/planning/housing-and-nature





**Royal Society of Wildlife Trusts** The Kiln, Mather Road Newark Nottinghamshire NG24 1WT

t: 01636 677711 e: info@wildlifetrusts.org w: wildlifetrusts.org Photo credits: Cover, p. 4 © Sarah Lambert; p. 2 © Matt Austin, Devon Wildlife Trust; p.3 © Dave Dunlop; p.12, © Paul Hobson.