A NATURE AND WELLBEING ACT

A GREEN PAPER FROM THE WILDLIFE TRUSTS AND THE RSPB

rspb giving nature a home

THE wildlife TRUSTS Protecting wildlife for the future

FOREWORD

A thriving natural environment is part of the solution to our most pressing social, economic and environmental problems.

But our environment is under more pressure than ever before and we continue to degrade our natural resources as if there's no tomorrow. The *State of Nature* report found that 60% of UK species we know about are in decline. To improve our economy, our communities, our health and our wellbeing, we need greater commitment to nature's recovery and fundamental changes in how we value, use and interact with our natural world.

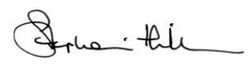
This Green Paper argues that the current legal and policy framework for the protection of nature has been vital in securing the nature we have left. But it will be insufficient to bring about the change required to protect nature and secure its recovery, not only for its own sake, but for all that it does for our wellbeing and that of future generations. We need an approach that not only commits to the recovery of nature, but takes action to improve nature as part of the solution to our social and economic challenges. This approach must be embedded at the very heart of how we govern and plan for our economy, our community, our health and our wellbeing.

Such fundamental change will require bold political action, with the clout to bring about change and the long-term commitment to keep successive governments on track over the years it will take to deliver what nature needs, and what we need from nature.

That's why we are calling for a new *Nature and Wellbeing Act*. We need new, enabling legislation to secure the recovery of nature in England in a generation. Our vision is that the status of species and their habitats will be improved through new powers and targeted action. Nature will be valued properly and put at the heart of decision-making, nationally and locally. Government at all levels and across all departments will be held to account for achieving progress against commitments to improving the natural environment. Local action for nature will be knitted together with planning and spending decisions, and ecological networks will be linked across the land delivering natural green spaces and natural systems that are more resilient in the face of climate change. People will be better connected with nature, will have access to more natural green spaces and will have a greater understanding of our natural world and what it does for us.

Taken together, these changes will help to deliver a wonderful, thriving natural environment and a healthier, fairer and more prosperous society.

We hope our ambitious proposals in this Green Paper will stimulate discussion and that all parties will commit to new laws for nature in the next Parliament.



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SUMMARY

This Green Paper makes the case for a *Nature and Wellbeing Act* for England to halt the decline in nature and speed its recovery, for the benefit of people and our environment.

We need a new legal commitment to the restoration of nature for the next generation.

To achieve this ambition, we need new laws to ensure protection and enhancement of nature as an investment in our nation's prosperity. We need to reconnect people with nature. From the local level up, the enhancement of our natural environment would be realised through local visions of how, where and why more nature can be delivered through planning and spending decisions.

Nature's recovery would bring a range of benefits, not least, for our health and wellbeing. Inactivity and obesity are escalating[1]; poor mental health is having a significant impact on wellbeing[2]; climate change is already affecting our urban areas and the productivity of our countryside[3]; many of our villages, towns and cities face growing risk of flooding[4]; and our economy continues to use many of our natural "assets" in an unsustainable way, which is likely to be a brake on progress and development in the future.[5] The list is long.

A high-quality natural environment and greater engagement with wildlife-rich green spaces can make a significant and effective contribution to all of these issues. It is clear that nature can be part of the solution to many of the challenges our society faces.

By working with nature, and getting it to work for us, we can not only protect and restore our natural world, but make it part of achieving many of our other social and economic needs and ambitions. However, in order to make this happen, we need a new and ambitious statutory framework for nature and wellbeing that truly reflects the interdependence between nature and people: a Nature and Wellbeing Act.

> Our wealth as a nation and our individual wellbeing depend critically upon the environment. It provides us with the food, water and air that are essential for life and with the minerals and raw materials for our industry and consumption. Less obviously, it provides the processes that purify the air and water, and which sequester or break down wastes. It is also in our environment where we find recreation, health and solace, and in which our culture finds its roots and sense of place.
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> *UK National Ecosystem Assessment: Understanding Nature's Value to Society. UNEP-WCMC (2011)*

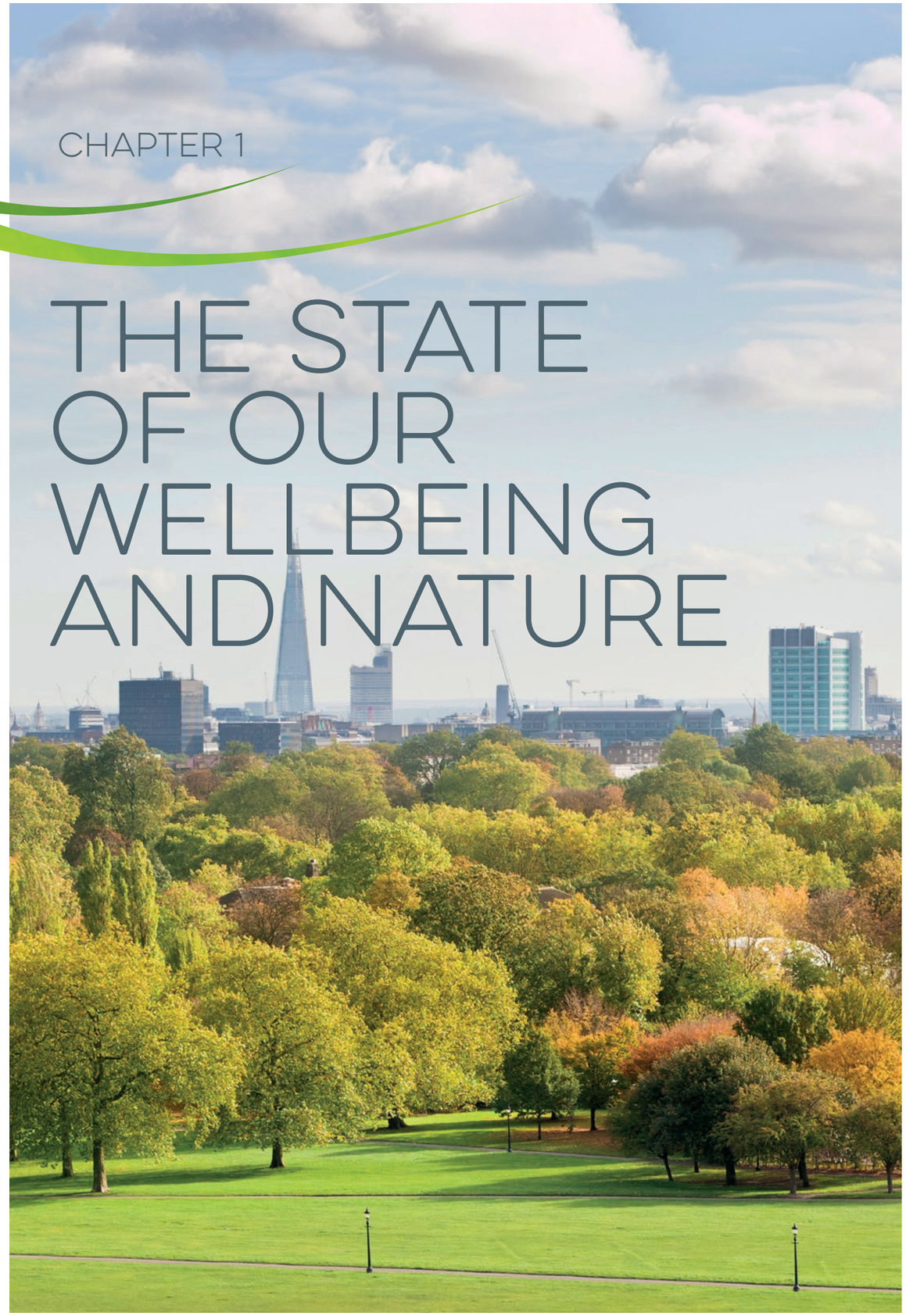
Chapter 1 examines the relationship between the state of nature, health and wellbeing and sets out why more nature and a greater connection to nature are good for us, and why it should form a core part of any policy response to these problems. It also explores public attitudes to nature and how current environmental legislation is essential to its protection but needs to be complemented with a more ambitious legislative framework.

Chapter 2 sets out the need for a commitment to nature's recovery in a generation and the mechanisms needed to achieve this in practice.

Chapter 3 explains why we need an ecological network that builds on existing protection to make space for nature across the country. It describes a new approach to local planning that can help people protect and enhance the nature that matters to them and improve planning and spending decisions.

Chapter 4 explores the role of nature in our economy and why we need a new, independent body to ensure that nature is built into the heart of decision-making across government and to hold the Government to account for restoring our natural world.

Finally, **Chapter 5** looks at how we could use the law to improve our connection to nature and the many benefits it provides us with.



CHAPTER 1

THE STATE OF OUR WELLBEING AND NATURE

The biggest challenges our society faces today are linked to the condition of our natural world. The wellbeing of people and planet go hand in hand.

The natural environment provides us with a range of vital services, such as clean water, crop pollination, flood protection, carbon storage, food and raw materials and healthy soils. As our population grows, the need for these services will become greater. The natural environment also underpins our economy and there is a growing recognition among economists and business leaders of the need to quantify and protect our natural assets (natural capital) as the foundation of our economy, but also as an important factor in business planning and risk management. The National Ecosystem Assessment was a powerful first snapshot of these natural capital benefits and the pressures they are under.

Yet our environment is under more pressure than ever before. The *State of Nature* report found that 60% of UK species we know about are in decline. Habitats are becoming more fragmented and their condition is worsening to the extent that only 37% of the best sites are in good condition. The ecological network that they make up is neither coherent nor resilient to pressures such as climate change. Many of the "free" (but valuable) services provided by nature are under threat, such as clean water supply, pollination, resilience to flooding and food production. Despite our existing legislation and policy, we continue to use many of our natural assets in an unsustainable way, putting our long-term prosperity at risk.

At the same time, we face escalating social and economic challenges. We are experiencing increasing levels of obesity and physical inactivity and one in four of us will experience a mental health problem at some point in our lives. Improvements in overall health are skewed towards wealthier sections of society, causing health inequalities to increase. Yet there is considerable evidence to show that contact with nature can help to prevent and reverse poor health and wellbeing.

In this chapter, we focus on the worsening state of our health and wellbeing, the deteriorating state of nature, and how recovery of nature is part of the solution to the challenges faced by us and the natural world of which we are a part. The nature conservation movement in England has more supporters than ever before. We have known for a long time that millions of people want to protect nature. Now, at last, we have the evidence to show just how much people need nature.

Fewer than one in 10 children regularly play in wild places, compared to almost half, a generation ago.

Childhood and Nature: a survey on changing relationships with nature across generations. Natural England (2009)

1.1. The state of our health and wellbeing*

Life expectancy in the UK is at its highest ever and infant mortality is at its lowest.[6] Yet within this generally positive picture, there are health trends that are getting worse, particularly for the poorest and most vulnerable in our society. Nature can be part of the remedy, saving money and helping to create a healthier and fairer society.

Physical inactivity affects 60–70% of the adult population: that is more than people with obesity, alcohol misuse and smoking combined.[7] The physical fitness of children is declining by up to 9% per decade.[8] In the UK, the costs of physical inactivity to the economy are £20 billion per year including direct treatment costs and work days lost through sickness.[9]

Obesity, which is often a consequence of physical inactivity, is increasing in both adults and children.[10] In the UK, 67% of adult men, 57% of adult women and 28% of children are overweight or obese.[11] Like physical inactivity, being overweight and obese increases the risk of type II diabetes, cardiovascular disease, cancer, hypertension and overall bad health.[12] Physical inactivity and obesity therefore pose a significant risk to wellbeing and are a major health challenge.

**The review of literature in sections 1.1 and 1.3 was carried out by the University of Essex on behalf of the Wildlife Trusts (2013).*

In 2011, 46.7 million anti-depressant prescriptions were dispensed in England, costing over £270 million and increasing by 22.6% from 2010.

NHS Information Centre (2012)

At least one in four people will experience a mental health problem at some point in their lives and one in six adults has a mental health problem at any one time.[13] One in 10 children aged between five and 16 years old has a mental health problem and will continue to experience these problems into adulthood.[14]

In 2009–10, the total cost of mental health problems was estimated at over £105 billion. The majority of these costs relate to those who experience mental health problems along with their families, but there are also sizeable costs for taxpayers and for business, estimated at £1,000 per employee, per year.[15] Mental ill-health costs more to society than crime, and public spending on mental health services is continually rising alongside the cost of anti-depressants.[16] Mental ill-health is a major public health issue which is having substantial effects on wellbeing.

Moreover, the picture is not consistent across the country or across the different sections of our population. Significant health and mental health inequalities persist in England and are growing and many of these are linked to environmental inequality. It tends to be minority communities, the poorest families and the most vulnerable people who are faced with the most degraded natural environment.[17]

Dying prematurely as a result of health inequalities costs 1.3–2.5 million extra lives per year (in England alone).[18] Individuals in higher socioeconomic groups have better health and fewer disabling conditions than those in lower socioeconomic groups.[19] Children from lower socioeconomic groups have a higher prevalence of mental disorders, experience overcrowding in the home, stress and an increased likelihood of having a disrupted family life.[20] Significant heath inequalities also exist between genders and between different ethnic groups.[21] Finally, the elderly in our society often experience poorer health care than other age groups.[22] They frequently experience social isolation and loneliness, which results in reduced quality of life, depression and low self-esteem. This in turn predicts higher mortality and morbidity.[23] With the increasing levels of dementia (and the policy aspiration to enable sufferers to "live well" with dementia), this group in our society has increasing and very specific health and wellbeing needs.[24]

1.2. The state of nature

These health challenges are mirrored by and associated with a severe decline in our natural environment. Nature is in crisis both globally and at home. There are four principal causes of damage: habitat degradation; over-exploitation; pollution (particularly global climate change); and the introduction of invasive non-native species. Across the UK, of the species we know about, 60% have declined in the last 50 years and many of our natural services continue to be exploited beyond sustainable thresholds.

In assessing the state of nature in England in more detail, we consider three key components:

- The extent and condition of protected natural sites;
- The extent and condition of priority wildlife habitats; and
- The population trends of priority species.*

Protected sites are havens for wildlife and hold much of our natural heritage in trust for future generations. But to improve our natural environment, these places need to be the backbone of a wider network that supports our natural world all across England. The fortunes of our priority species are a vital barometer as to how well we are doing.

The state of our nationally protected sites

Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar Sites comprise the network of nationally and internationally protected sites. From the saltmarshes on the Solway Firth to the shingle spit at Dungeness and the heathlands on the Lizard to moors of the North Pennines, they represent the very best sites for wildlife in England.[25] The extent of protected terrestrial, freshwater and coastal sites has seen no significant change in the last five years and covers about one million hectares (ha), around 8% of England. Over 139 ha of SSSI were lost to development between 2007 and 2013, which represents 0.01% of the resource.[26]

Whilst existing legislation has been successful at protecting the network, there has not been as much progress in improving the condition of these nationally important wildlife sites. "Biodiversity 2020", the revised England Biodiversity Strategy, includes an outcome of 50% of SSSIs in favourable condition and at least 95% in favourable or recovering condition by 2020.[27] As Table 1 shows, although more sites are under management and recovering, the proportion of SSSIs currently in favourable condition has actually decreased since 2010. It is clear that, on current trajectory, this target will not be met.

**UK BAP priority species were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan.*

Table 1. The condition of SSSIs in England

Date	2010	2014
Area in favourable condition (50% target)	41.0%	37.5%
Area in unfavourable recovering condition	54.8%	58.6%
Area in unfavourable recovering and favourable condition (95% target)	95.8%	96.2%

In 2010, a review led by Professor Sir John Lawton concluded that there are serious shortcomings in the network of wildlife sites: "many of England's wildlife sites are too small" and "important wildlife habitats are generally insufficiently protected and undermanaged".[28] He concluded that "we need to take steps to rebuild nature" and summarised the need for a coherent ecological network in four words: more, bigger, better and joined (see Chapter 3). In other words, nature's recovery will require more space for wildlife, on a greater scale, managed better for wildlife and, crucially, connected up in the wider landscape – which will mean improving the wider environment and reducing the pressures on nature.

Nationally and internationally important wildlife sites, local wildlife sites and areas identified primarily for landscape reasons (e.g. National Parks and Areas of Outstanding Natural Beauty) all play an essential role in developing a national ecological network.

The state of our ecological network has particular implications for the resilience of wildlife to climate change. The Lawton Review concluded that the fragmentation of our current ecosystem network means that it does not represent "a coherent and resilient ecological network which is capable of responding to climate change and other pressures".[29] The need for action is reflected in the Government's *National Adaptation Programme* for increasing resilience to climate change, which sets an objective to "build the resilience of wildlife, habitats and ecosystems (terrestrial, freshwater, marine and coastal) to climate change, to put our natural environment in the strongest position to meet the challenges and changes ahead".[30]

The state of our priority wildlife habitats

Biodiversity 2020 includes objectives for the extent and condition of priority habitats:

- Better wildlife habitats with 90% of priority habitats in favourable or recovering condition by 2020; and
- No net loss of priority habitat and an increase in overall extent of at least 200,000 ha by 2020.[31]

These are laudable aspirations but the assessment in 2010 was that priority wildlife habitats could be managed better to support wildlife and biodiversity and, outside SSSIs, they have not been adequately protected. Not much has changed since then.

Wildlife habitats have been very substantially reduced in extent within the last century including, for example, a 97% loss of species-rich grasslands in England and Wales. The total extent of priority terrestrial and coastal habitats is 1.93 million ha; this represents 15% of England. The extent of different habitat types ranges from under 1,500 ha of saline lagoons to over 735,000 ha of deciduous woodland. There is currently no mechanism for recording the loss of priority habitats outside protected areas in England. The net change in the extent of priority habitats since 2008 (the last assessment) is therefore unknown. Whilst there has been significant activity both within and outside Nature Improvement Areas and through agri-environment schemes to expand wildlife habitats, and work is underway to quantify progress, it is very likely that the outcome on increasing priority habitats will not be achieved at the current rate of delivery.

There is no systematic recording of the condition of priority habitats outside of protected areas, but the Government has used the proxy of areas under Higher Level Stewardship agreements as equating to favourable or recovering condition. The assessment in 2013 was that overall 52% of priority habitats were in favourable or recovering condition.[32] The trend in condition has not been assessed but it appears likely that the outcome for habitat condition by 2020 will not be met without significant new action.

The state of our priority species

Species are the building blocks of biodiversity. Maintaining the variety of species and healthy populations is the ultimate measure of the state of nature. Biodiversity 2020 set out the objective that "*by 2020, we will see an overall improvement in the status of our wildlife and will have prevented further human induced extinctions of known threatened species*".

For species such as hen harriers and whitebeams, which are on the brink of extinction in England, it is vital that targeted species recovery work is undertaken and pressures that are pushing them towards the edge are fully addressed. But it is also important that work to manage sites and expand wildlife habitats fully incorporates the needs of priority species.

There has been no systematic analysis of the status of priority species since 2008. When an analysis of progress in England suggested that 11% were increasing, 32% were stable, but 22% were still in decline (the remaining species had either been lost or their trends were unknown or unreported).[33] This analysis showed that targeted work for species, such as large blue butterflies and stone-curlews, is very effective. However, it also illustrated that we need to undertake more species recovery work coupled with broader work on sites and habitats because species are being added to the priority list faster than they are being removed.

In 2013, a new Watchlist indicator was published which showed the overall trends in populations of 155 priority species at a UK level since 1970.[34] This showed a massive 77% decline in the abundance of priority species. Although this included a sharp decline in the early years, it is of concern that the indicator declined by 18% between 2000 and 2010. In England:

- 30 out of 54 butterfly species have decreased (56%), although others, such as commas and holly blues, have increased as a result of climate change.
- More of the bird species that were assessed were increasing (59%) than decreasing (41%), but many farmland, woodland and migrant birds are declining, such as turtle doves, which are disappearing at the rate of 7% per year.
- 60% of flowering plant species are decreasing, with 29% declining strongly, a similar trend to the rest of the UK.

Concerted action will be required to drive an overall improvement of England's priority species by 2020.

1.3. The role of nature in improving our health and wellbeing

Key areas of our health and wellbeing are in decline, as are important elements of our natural environment. Yet there is a growing recognition, within both scientific literature and government policy, that nature is good for us and can be part of the solution to our health and wellbeing challenges, now and for future generations.

Nature and physical activity

Easy access to nature can encourage physical activity for everyone, no matter their age or social background.[35] This tends to happen in three ways: i) increased physical activity as a result of nature nearby the home; ii) incidental activity as a result of nature-based activities; and iii) active participation in activity in nature.

Natural places provide attractive locations for outdoor recreation. Between March 2012 and February 2013, an average of 41% of the English adult population visited the natural environment during the previous seven days. The English adult population participated in an estimated 2.85 billion visits to the natural environment in that period.[36] Nature nearby the home plays a particularly important role, with open spaces such as parks providing important places for people to be active, especially in urban areas.[37] Proximity of green space to the home is associated with higher levels of physical activity and improving access to green space can encourage people to be more active.[38]

In general, individuals with easy access to nature are three times more likely to participate in physical activity and 40% less likely to become overweight or obese.[39] Young people from rural areas with easy access to green space are more active than children from urban areas.[40]

Importantly, "green exercise" (exercise that takes place in natural spaces) seems to have an enhanced health benefit, providing greater health benefits than contact with nature or physical activity alone.[41]

For every £1 spent on establishing healthy walking schemes the NHS could save £7.18 from the cost of treating conditions such as heart disease, stroke and diabetes.

If every household in England were provided with good access to quality green space it could save an estimated £2.1 billion in health care costs.

Our Natural Health Service: The role of the natural environment in maintaining healthy lives. Natural England (2009)

Nature and wellbeing

Accessible green space is good for psychological wellbeing, improving recovery from stress, protecting people from future stress and improving concentration.[42] Green space quality, including its richness in wildlife, may be more important to mental health benefits than its quantity. People living near quality green space, full of wildlife and thriving habitats, were twice as likely to report low psychological distress as those living near low quality open spaces.[43]

The simple fact is that people tend to live longer when they have access to green space. Perceived neighbourhood greenness is strongly associated with better mental and physical health.[44] Those living in highly green areas are much more likely to have better physical and mental health.[45]

Nature near home is particularly important for children, increasing their ability to cope with stressful life events, directed attention and cognitive function.[46]

Even viewing nature from a window can increase recovery from mental fatigue, reduce stress, enhance recovery from illness, and improve concentration and mood.[47] Access to nature in a health care setting, for example through the use of a garden in a hospital, also benefits health and wellbeing via increases in relaxation and the ability to cope, reductions in stress and improved mood.[48]

Nature and health inequality

The most economically deprived are often the most nature deprived, leading to health inequalities.[49] The poorest neighbourhoods are more likely to have environmental characteristics displaying risk to health such as poor housing, crime and poorer air quality, lack of natural and play spaces and high levels of traffic. Those living in the most deprived areas are 10 times less likely to live in the greenest areas and die on average seven years earlier than those in the richest areas. Furthermore, the difference in disability-free life expectancy between people living in these areas is approximately 17 years.[50]

Nature and social interaction

Access to nearby nature can facilitate social interaction and this, in turn, provides direct benefits for health.[51]

Nature near the home is also associated with reduced risk of crime, aggression and domestic violence. Residents living in areas with high levels of vegetation report less aggressive and violent behaviour and there is evidence of a 52% reduction in property and violent crime in areas rich in nature.[52]

Greener neighbourhoods give rise to stronger neighbourhood ties and the more trees and vegetation in an area, the more people use it and spend time in it.[53] Green spaces and nature also have a role to play in bringing communities together and helping to strengthen shared experience and identity between people of different cultures, faiths, generations and circumstances.

1.4. Public attitudes to nature

The European Commission has carried out public attitude surveys on biodiversity that provide an insight into the strength of support for nature conservation and the reasons behind it.[54] In 2013, for the UK population:

- 85% considered biodiversity loss in the UK to be a serious problem (*very serious or fairly serious*), and
- 98% felt that the Natura 2000 protected site network plays an important role (*very or somewhat important*) in safeguarding nature's role in providing clean air and water.
- On the reasons why it is important to halt biodiversity loss:
- 94% agreed that it is a moral obligation,
- 90% agreed that our wellbeing and quality of life is based on nature and biodiversity,
- 88% agreed that biodiversity is indispensible for the production of goods such as food, fuel and medicines, and
- 69% agreed that Europe will get poorer economically as a consequence of the loss of biodiversity.

This demonstrates that most people understand the link between nature and their prosperity, health and wellbeing, and that people consider that halting the loss of biodiversity is important. We know that we want to improve our natural environment and we know that we need to. In the next chapters, we demonstrate that we must add to our environmental protection laws with a long-term commitment to restoring nature, and new powers to put our natural environment at the heart of decision-making nationally and locally.

CHAPTER 2

NATURE FOR THE NEXT GENERATION

The first step to restoring nature is to set a long-term commitment, with legally binding targets and clear accountability to ensure that we pass on our natural environment to the next generation in better condition than we inherited it in.

All three elements are necessary. Targets alone will not reverse the decline in nature, unless they are accompanied by powerful reporting and transparency plans – people need to know whether progress is being made – and by the right powers to give governments, businesses and communities a good chance of meeting them. Current policy commitments such as that to halt the loss of biodiversity by 2010 have been positive, but isolated ambitions have come and gone relatively unnoticed because there is no political consequence for failure, nor sufficient support for success. The Government should set legal targets for 2040, supported by the tools for transparency and delivery needed to achieve them, built on the bedrock of existing nature conservation legislation.

The need for new legislation

A strong and coherent legislative framework is needed to establish a commitment to the recovery of nature, not only for its own sake, but in recognition of the benefits in the quality of life this would bring to people across England. It would include the tools to recognise nature's recovery as a vital component of our national wealth and wellbeing and the mechanisms through which local visions for nature can be delivered.

Our current legislation, and the myriad of strategies produced by the Government and its agencies, have not achieved this. We need a new Nature and Wellbeing Act to deliver:

- Recovery of nature within a generation, with increasing biodiversity, more sites in good condition, sustainable management of natural capital and improvements in health and wellbeing from greater access to and engagement with nature;
- Local action for nature knitted together with planning and spending decisions, and across boundaries, to create an ecological network across the land;
- Threatened species brought back from the brink and continuing to recover;
- Nature valued properly and put at the heart of decision-making, nationally and locally; and
- People connected with nature, through access to natural green space and better education about our natural world.

How would it work?

- The Nature and Wellbeing Act would take a positive approach to building our need for nature into every aspect of our lives.
- Like the Climate Change Act 2008, it would use duties and reporting to create accountability and ensure that its implementation was the concern of all relevant government departments, not simply a responsibility of the "environment" Department.
- It would build on, rather than replace, existing legislation for the natural environment, by introducing a driver for its recovery and mechanisms through which we can better value nature and better connect people with nature.
- It would give life to the Lawton approach to saving nature at a landscape scale, linking up local efforts and reducing the complexity that stands in the way of investing in nature.
- It would make nature's recovery a public policy objective of central importance to everyone and give it the priority it deserves.

The new Nature and Wellbeing Act should herald a wider long-term commitment by government to take consistent account of nature and the wider environment across all policy making and legislation.

2.1. A new ambition for nature's recovery

The *Natural Environment White Paper* established the need to recover nature. It also voiced the Government's ambition for this to "be the first generation to leave the natural environment of England in a better state than it inherited" and made

a specific set of commitments which, if met, would help to achieve this. Its ambitions and commitments received cross-party support. These commitments were then incorporated into *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*, which was produced to guide conservation efforts.

Key Commitments from Biodiversity 2020 (2011):

1. No net loss of priority habitats and an increase of at least 200,000 hectares (ha) of priority habitats.
2. 50% of Sites of Special Scientific Interest (SSSIs) to be in a favourable condition by 2020, with 95% in recovering or favourable. 90% of priority habitats should be in a favourable or recovering condition.
3. At least 17% of England's land and inland water managed effectively in order to safeguard biodiversity and ecosystems services.
4. 15% of degraded ecosystems that are important for climate change mitigation and adaptation will be restored.
5. An overall improvement in the status of wildlife with extinction of threatened species prevented.

2.2. Existing nature legislation

In England, we have a well-established body of legislation for the protection of species and habitats. We should be proud of this and cherish the laws that have made the statute books over many decades. These evolved from a visionary concern for the protection of our wildlife in the face of post-war development in the 1940s, and have been added to over the years and strengthened by EU laws, in large part reflecting UK aspirations and influence. The EU Birds and Habitats Directives have provided an excellent legislative framework for the protection of nature in England, complementing and strengthening our national laws.

We also have world-leading laws for responding to climate change in the decarbonisation framework provided by the Climate Change Act 2008. This complements the EU Climate Change Package and forms part of the response to climate change, which remains perhaps the most urgent threat to nature and society.

In this way, current national legislation provides a strong foundation for the protection of the most important habitats and species in England. It has been largely successful in terms of hanging on to what we have left and without it, the picture would be much worse.[55]

Nature legislation brings net benefits to society. The estimated benefits of existing biodiversity regulations in England outweigh the costs by almost 9:1.

The Costs and Benefits of Defra's Regulatory Stock: Emerging Findings From Defra's Regulation Assessment. Defra (2011)

However, this focuses primarily on hanging on to what we have left rather than driving the positive recovery of nature.[56] Moreover, the approach to implementation of this legislation tends to "ghettoize" nature, focusing on looking after designated areas.[57] Failures to properly implement, resource or enforce existing legislation, mean that successive Governments have been unable to protect the wildlife in the wider countryside, urban areas or local places that people visit for their own enjoyment, if they do not meet specific scientific guidelines for protection.

Whilst the Birds and Habitats Directives and their transposition into national legislation provide most of the mechanisms required to protect wildlife in the wider environment and to secure its recovery, we lack a clear driver to ensure its effective implementation.

In terms of policy, much of the evidence set out above was reflected in *The Natural Environment White Paper* published in 2011.[58] This policy document was pioneering in its articulation of the benefit of spending time in nature for our health and wellbeing (what it termed "nature's health service"). It particularly flagged the importance of the quality of the natural environments close to homes and workplaces.

The White Paper also recognised that we are increasingly disconnected from nature and set out an ambition to "strengthen the connections between nature and people", including improving public health locally by making high-quality green space available to everyone.

It identified the need to create more accessible natural areas close to where people live and work and to remove barriers that prevent people from using them. However, the logical next step of making investment in the local natural environment a positive, effective and ultimately cost-saving public health intervention has not taken place.

This change is unlikely to come from the current approach, which is focused largely on voluntary action.

Building on existing legislation

The benefits of building on existing legislation can be illustrated by changes to SSSI protection. SSSIs were introduced in 1949, but until 1981 provided limited protection from development and did nothing to stop damage caused by changes in agricultural and forestry management. Private landowners were not notified of their existence, and 10–15% of SSSIs were damaged each year due to practices such as agricultural intensification.

The Wildlife and Countryside Act 1981 provided a cost-effective way to transpose the newly-adopted EU Birds Directive and led to the strengthening of the SSSI series. SSSIs had to be re-notified to receive greater protection, with both the Local Authorities and landowner/occupies informed of their presence. The emphasis was placed on preventing damage from development and changes in land management, and proved effective at slowing the direct loss of protected areas. By the early 1990s, the area of SSSI being lost per year had fallen to below 0.005% and the area subject to short-term damage to around 2–3% per year.

The Countryside and Rights of Way Act 2000 gave statutory countryside agencies greater powers to prevent damaging activities and enforce better site management, further strengthening the SSSI network. The Natural Environment and Rural Communities Act 2006 created a new offence, which prevented public bodies from carrying out an operation likely to damage a SSSI without reasonable excuse. Since 2007, only 139 ha, or 0.01%, of the total SSSI network has been lost as a result of development or land-use change reflecting the very strong presumption against developing SSSIs in both the primary legislation and national planning policy.

The value of the natural environment is routinely ignored in public and private decision-making for economic reasons, such as market failure. A range of interventions have been tried and tested and it is clear that to deal with our most serious environmental challenges, government intervention is required alongside voluntary and market-based approaches.[59]

Views about environmental regulation in the UK are strongly positive, judging by responses to the first phase of the Red Tape Challenge (RTC). A recent study analysing the published documentary output of the RTC has found that most of the comments submitted to the RTC website indicate that more regulation is needed. In relation to biodiversity protection, for example, 84% of responses were in support of keeping or strengthening regulation. Only 2% were in support of removing or weakening it.[60]

The quality of the local natural environment is one of the factors that shapes our health over a lifetime. A good-quality environment is associated with a decrease in health problems such as high blood pressure and high cholesterol. It is also linked with better mental health, reduced stress and more physical activity.

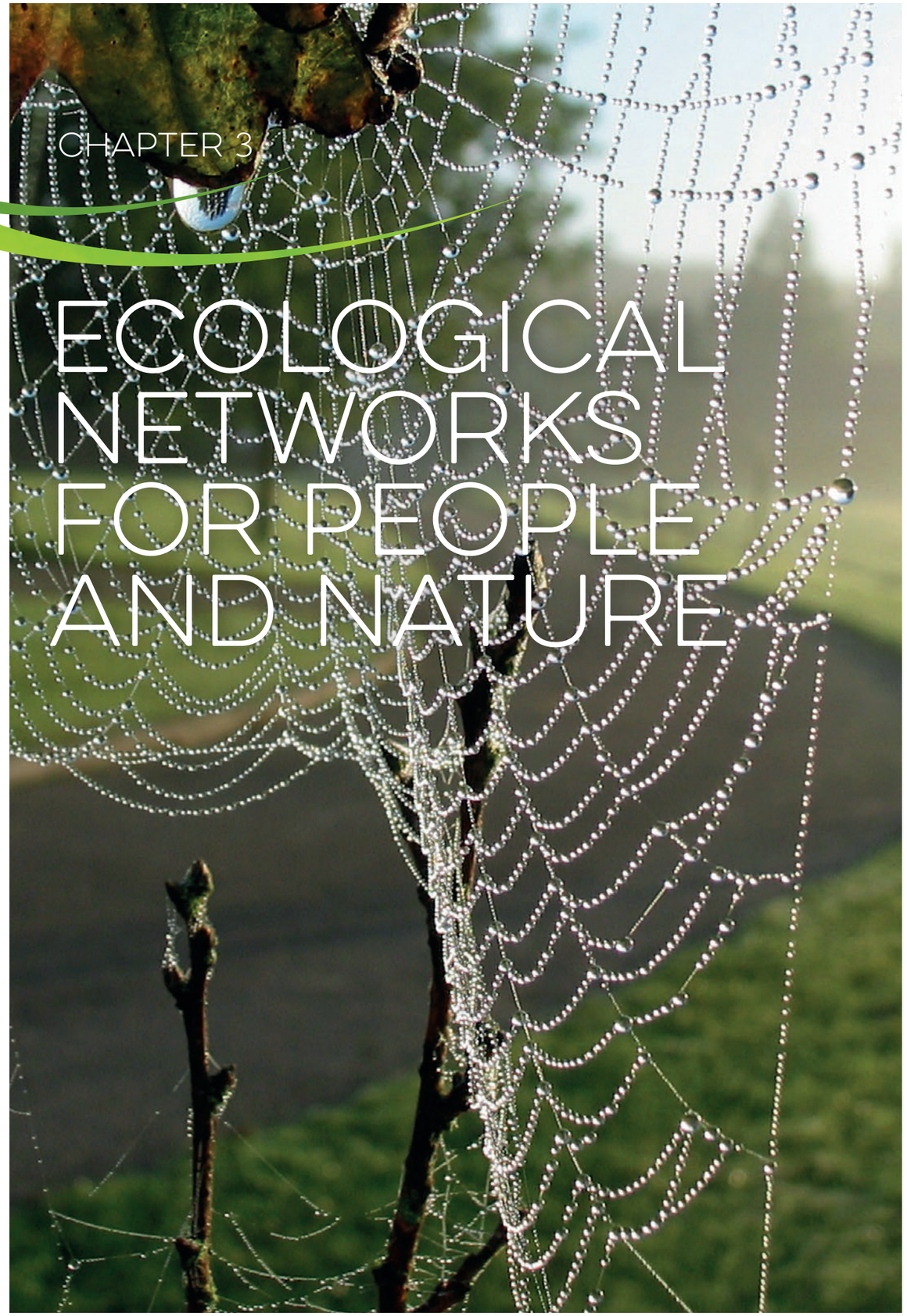
On the other hand, a poor natural environment can damage people's health and contribute to health inequalities.

The Natural Choice: securing the value of nature (Natural Environment White Paper). HM Government (2011)

The Nature and Wellbeing Act would introduce a statutory commitment to nature's recovery as a means of providing a strong, long-term focus for government. This commitment would be accompanied by a set of time-bound targets against which progress in achieving the commitment would be assessed. This would include a requirement to report to Parliament on a regular basis, improving the democratic accountability of plans to restore nature. A precedent for placing targets and associated reporting requirements in legislation in this way was provided by the Climate Change Act 2008.[61]

We recommend that the Nature and Wellbeing Act should introduce:

- A statutory commitment to restore nature in England within a generation.
- Specific targets for nature's recovery, including:
  a. A 10% increase in the species Watchlist indicator by 2040[62]
  b. At least 80% of SSSIs in favourable condition by 2040
  c. Alongside targets for biodiversity and site condition, targets could also be set for particular natural capital assets (developed through the work of the Natural Capital Committee (NCC) or an Office for Environmental Responsibility) and people's connection to nature, once the necessary evidence and methodologies were developed.



CHAPTER 3

ECOLOGICAL NETWORKS FOR PEOPLE AND NATURE

Built around existing protected sites (e.g. Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites), ecological networks play a critical role in restoring nature. This was emphasised by the Lawton Review and recognised in *The Natural Environment White Paper*, which identified their potential for fulfilling wider objectives such as resilience of wildlife to climate change, flood resilience, pollinator health, provision of clean water, creation of attractive and sustainable places to live, and provision of spaces for outdoor recreation.[63]

We want to create a resilient and coherent ecological network at national and local levels across England. Achieving this will require a fundamental shift in approaches to conservation and land management.

The Natural Environment White Paper (2011)

The White Paper recognised the need for ecological networks to be delivered via the planning process through "ecologically coherent planning".[64] This was reflected in the *National Policy Planning Framework* (NPPF) which promotes planning of local ecological networks.

However, despite these positive policies in the NPPF, local ecological networks are not being consistently developed or integrated with other objectives as part of the local strategic planning process. A lack of ecological expertise in local authorities, combined with the political imperative given to other priorities means that NPPF policies alone are not strong enough to take ecological networks from the periphery of the local planning process to the very centre of a vision for a local place.

The White Paper also failed to introduce any sort of national commitment to, or framework for, the creation of ecological networks. This is needed to ensure that local networks are designed consistently across England to create an ecological network which functions at a national level. Only if this happens will it support national policy objectives to protect and restore nature as well as the other economic and social objectives that rely on the presence of a healthy natural environment.

Finally, the only way that plans for ecological networks will attract the investment and commitment needed to ensure their delivery is to place them at the core of our processes and decisions that determine how land is used, public funds are allocated and economic and social (as well as environmental) policy targets are delivered. Therefore, at the local level, plans for creation of ecological networks must be fully embedded in local plans so that they are given weight in development control decisions. Their influence must then go beyond the sphere of local planning and become the concern of all relevant government bodies whose objectives can be delivered locally by a healthy, functioning natural environment. Examples could include the targeting of agri-environment payments, allocation of Water Framework Directive funding for catchment management, flood resilience investment, preventative health care initiatives, and so on.

A requirement on national bodies to work consciously through such a "blueprint for investment in nature" would do a great deal to join up national and local activity and ensure more effective delivery for nature on the ground. An ecological network could deliver benefits for a range of habitats and the species that depend on them. The national framework should provide for specific planning and action for the protection and recovery of the national populations of our most threatened species.

Where nature is protected and enhanced as part of our local neighbourhoods, settlements and landscapes, we will be better connected to it and will benefit most from the contributions it makes to our everyday lives. At this scale, its future can become personal to people and they can play a part in identifying where and how nature is protected and restored, not only for their own use, but as a contribution to a wider vision for their local area.

However, we also have an obligation to the future of our natural environment at the national level, in order to comply with domestic and international legal

commitments and to create a sustainable economy and society.[65] Planning for the protection of nature at the national and transboundary level is also essential for safeguarding our habitats and species, for example through protection of species ranges, planning for and supporting adaptation to climate change, and addressing the needs of migratory species which require coordinated action both within and across national boundaries.

Therefore, we need national commitment to the recovery of nature in combination with effective local delivery, so that local efforts knit together across the country and contribute to the achievement of our national objectives – local delivery must be set within a bigger context to ensure national interests are also fulfilled.

The approach must be guided by science, so that the long-term recovery of nature is led by evidence of what types of habitats are needed and in what location in order to best protect and recover ecosystems and natural processes. Information also needs to be shared to ensure that specific interventions for threatened species can be targeted to the right areas. This points to a vitally important role for scientific advice and information at both the national and local level to ensure that all activity is targeted in a way that is both effective and scientifically robust.

We recommend that the Nature and Wellbeing Act should introduce:

- **A requirement for DCLG and DEFRA to create a national ecological network built at the local level, and knitted together across administrative boundaries.** This would include guidance for local authorities on how to identify, map and deliver an ecological network, to ensure a consistent approach across England.
- **A reporting requirement to ensure that Parliament is kept informed of progress towards the creation of the national network.**
- **A duty on local planning authorities to identify, map and embed local ecological networks in local plans.** Networks need to be woven into a wide range of local policy and investment decisions, from the design and location of new housing, flood alleviation, preventative health delivery to outdoor education, recreation and job creation.
- **A duty on all relevant public bodies (including Natural England, Environment Agency) to contribute to the planning and delivery of local ecological networks,** as part of their strategy towards fulfilling both national objectives for nature and the wider social objectives related to the services that local ecological networks provide.

The commitment to the creation of ecological networks has been included in legislation in several European jurisdictions, including France and Germany along with mechanisms to ensure their planning and delivery through the strategic planning process.

3.1. Our most threatened species

An ecological network will deliver benefits for a range of habitats and the species that depend on them. Within this, there is also a need to provide specific planning and action for the protection and recovery of the national populations of our most threatened species, many of which will need urgent, targeted intervention to pull them back from the brink of extinction.

Targeted action to support these species is vital to supplement more general habitat protection. Its inclusion in legislation strengthens the commitment to these species and will highlight the need for dedicated activity and resources to be focused on their survival, recovery and sustained conservation management.

The success of this intervention will require detailed scientific information and technical support in order to guide effective conservation action on the ground and to target practical interventions to the right areas, especially with the escalating and sometimes unpredictable impacts of climate change. At the same time, in order to ensure that we meet our national commitments to the recovery of threatened species, regular reporting to Parliament on progress will be essential.

We recommend that a Nature and Wellbeing Act should introduce:

- **A duty on the Secretary of State to list species threatened with extinction.**
- **A duty on the Secretary of State to identify and publish the actions needed to improve the status of species threatened with extinction.**
- **A requirement to report to Parliament on the status and trends of all listed priority species and to review the list on a regular basis.**
- **A system to encourage the local support for and targeting of action to recover nationally threatened species.**

Local Ecological Networks – a blueprint for investment in nature

Once in place, a spatial plan for local ecological networks is also a useful blueprint for investment in nature. It can be used to target public and private sector funds where they are needed to help restore degraded habitat, create new links in the landscape between woodlands, meadows, rivers, allotments, orchards and so on. It can also be used to pull together local initiatives, such as Local Nature Partnerships (LNPs), Local Enterprise Partnerships (LEPs), Local Health Boards and so on, around a common vision for nature and all that it can provide the local area.

Introducing a blueprint for investment in local nature as a part of the local planning process, will also promote a sense of trust within local communities that the environment is not being sacrificed in the short term in order to address other issues – but is being protected and invested in for the long term.

What are ecological networks – and why are they needed?

The Lawton Review (Making Space for Nature) and *The Natural Environment White Paper* identified a mechanism to protect and restore our natural environment from the bottom up: ecological networks.

An ecological network is made up of high-quality natural sites, and sites with potential to become so, which together contain the diversity and area of habitats needed to support species and have the connections between them that enable species to move.

In England, despite our long dedication to the protection of special sites for nature, we have let some of our sites degrade in quality and we have neglected the connections between them. We need a strong and concerted effort to rebuild them at a local level and then to ensure these local networks are interconnected to develop a larger scale network which functions at a national scale.

Any ecological network in England would include existing designated sites, local sites (which lack statutory protection but are often vitally important in terms of ecological function at the local scale), and other areas of habitat that help to link sites together. It would also recognise large areas where significant, targeted enhancements of the network can be achieved (i.e. Ecological Restoration Zones as set out in the Lawton Review).

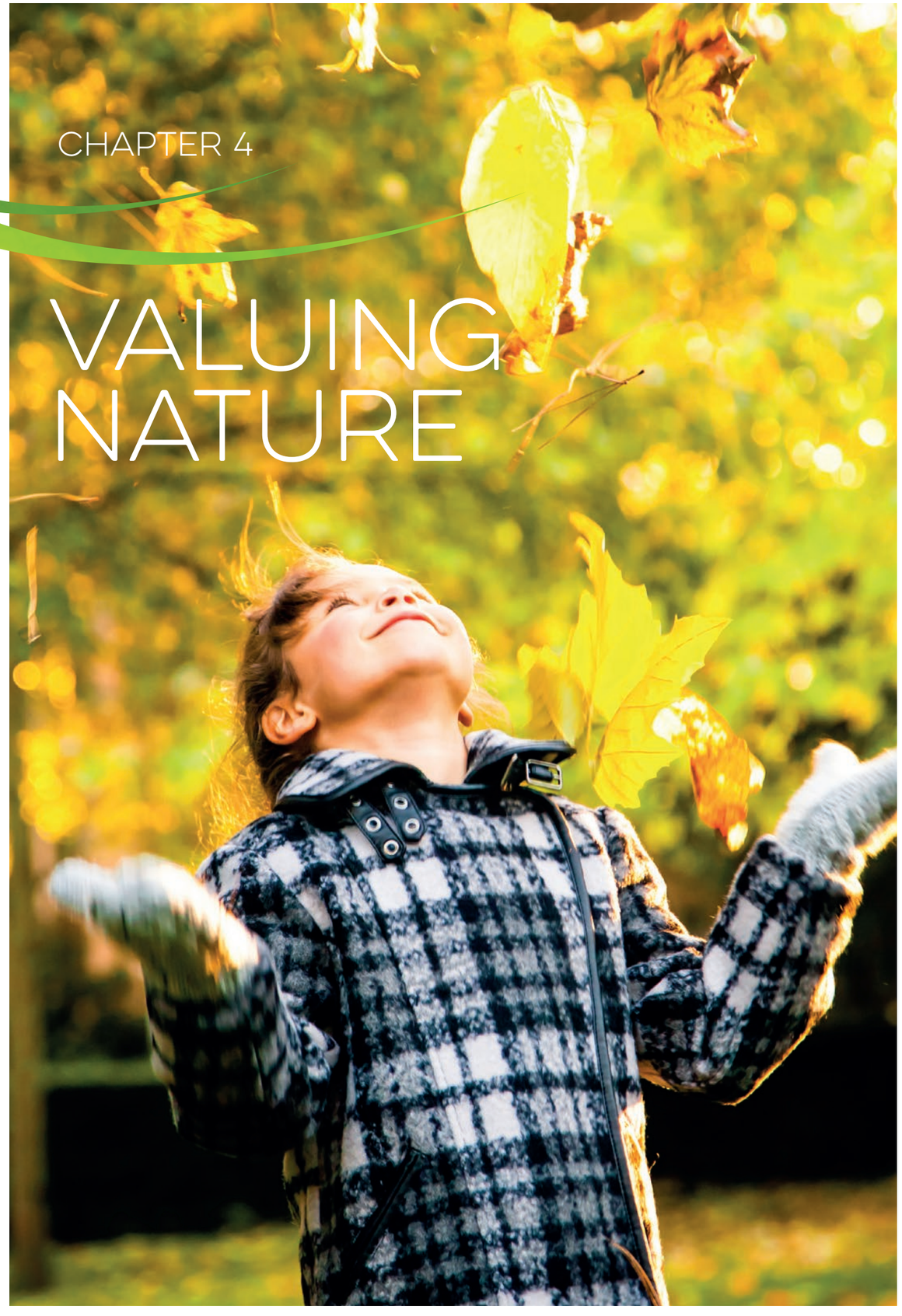
Why are they a useful approach to the local protection and restoration of nature?

The beauty of creating a network is that it is a spatial concept that people can understand. It requires a visual and spatial approach in its design – mapping of what exists, design of what is needed and then targeting of investment to specific localities to create and restore the habitats needed to reconnect nature where they are needed most.

It is an evidence-led process, built on a scientific evidence base of what is needed where, which already exists in England via the National Ecosystem Assessment and through Natural England's work on Natural Character Areas.

It is a "place-making" process, concerned primarily with making every locality one which functions environmentally and can therefore provide the multitude of benefits that local people need, whether in a rural or urban setting: special places to enjoy for recreation, an attractive setting for, and component of, our towns and villages, a vital element in protection from flooding and drought, important areas for food production, a carbon sink in our quest to reduce greenhouse gas emissions and a fundamental part of local landscapes which in turn support tourism and a recreation economy.

Ecological networks are therefore a mechanism for achieving a multitude of objectives – environmental, social and economic. Their design should be at the heart of our local planning processes. Their delivery should be a priority for local long-term investment and a unifying target for implementation by local government, partnerships (e.g. LEPs and LNPs) and national agencies alike.



CHAPTER 4

VALUING NATURE

Nature has immeasurable intrinsic value. It has social, spiritual and emotional value, it is vital for our health and wellbeing, and provides multiple benefits for the economy and society. Yet the value of nature is routinely overlooked or underestimated in decision-making. Much of the value that derives from our natural environment is economically "invisible" and cannot be captured in conventional measures of economic progress, despite its importance for human health and prosperity.

There are well-established economic reasons why society and individuals systematically fail to take full account of the value of nature in decision-making (e.g. externalities and market failure); many natural services are undervalued, or not valued at all, because they are not directly traded in markets. Of course, some natural services do generate income directly because they produce outputs that can be readily traded (such as food and fuel, for example). However, others which are equally essential for economic activity and human wellbeing, such as climate regulation, soil formation, crop pollination, flood control, and air and water quality regulation, do not.[66]

This has led to the unsustainable over-exploitation of the unvalued and undervalued elements of the environment for short-term gain and has resulted in their accelerating degradation over time, reducing their ability to produce future human wellbeing. This is particularly concerning when it comes to wild species and habitats, given the difficultly or feasibility of replacing them. If the natural environment is to support us now and in the future, it is essential that its value is accounted for in all decision-making and that it is invested in appropriately.

The UK Government already has guidelines for incorporating environmental values in decision-making, but they are not implemented at all levels of government and take a partial view of the value of nature.[67] A disproportionate weight is given to actions which yield marketable outputs, despite the accumulating evidence that the non-marketable benefits exceed the marketable benefits associated with degrading habitats, such as the flood mitigation potential of wetlands or the climate moderating potential of healthy peatlands.

All decisions involve trade-offs between competing options. Failing to consider the value of nature in decision-making frequently leads to a sub-optimal use of resources and means that opportunities for gains in human wellbeing are being lost. In simple terms, when we don't value nature, we make bad decisions. The extent to which the disproportionate emphasis on marketable outputs leads to bad decision-making and poor value for money was demonstrated by the *UK National Ecosystem Assessment* and Follow-on Project in relation to agriculture and forestry. Taking account of the value of the full range of services that an ecosystem provides can lead to better decision-making, and real gains for nature, wellbeing, and the economy.[68]

The benefits we obtain from nature are ultimately dependent on the quality and quantity of our "natural capital": the elements of nature that produce value to people. Our natural capital assets include wild species and habitats, clean air, rivers, soils and seas.

Alongside manufactured, financial, human or social capital, natural capital generates economic value. This value is potentially vast and natural capital has the potential to provide a continuous flow of benefits provided such assets are managed sustainably. Preliminary work by the Office of National Statistics, for example, estimates that the monetary estimate of only a selected number of components of UK natural capital was £1,573 billion in 2011, 4.1% lower than in 2007.[69] Now is the time to begin incorporating these values systematically into our macroeconomic accounts and planning strategies.

The Natural Environment White Paper did contain an ambition to develop a set of national Natural Capital Accounts and establish a Natural Capital Committee (NCC) to advise government on the state of our natural capital. This independent committee, formed of leading economists and ecologists, has subsequently produced two annual *State of Natural Capital* reports, providing a summary of the existing evidence regarding the state of England's natural capital assets and developing a framework for incorporating the value of these assets into the national accounts and decision-making.

Why protect our peatlands?

Only 4% of our upland peat is in good ecological condition (http://www.theccc.org.uk/publication/managing-the-land-in-a-changing-climate/), yet we continue to allow it to be burnt, drained, dug up and degraded. Of course, a few people may profit from exploiting peat: burning helps to create habitat for game shoots and we can dig up peat to be sold for horticultural use. However, this completely ignores the value (non-market benefits) that healthy peatland provides us: at the international level, peat locks up extraordinary volumes of carbon from our atmosphere; at the national level, it is a life-support system for upland biodiversity – we make a million visits to the uplands each year to enjoy the spectacle; at the community level, peat helps to slow water run-off and prevent flooding. By contrast, burning peatland vegetation can contribute to flooding and leads to discoloured water that has to be cleaned up by water companies – a price that local people pay for on their water bills. If we valued nature properly from the outset, the calculation would be clear: we must invest in the restoration of our peatlands, not continue to take from them.

In 2015, the NCC will publish its third and final report containing a 25-year plan to maintain and improve our natural capital.

The NCC has also been contributing to the development of corporate natural capital accounting. Supported by this work, British companies are playing a leading role in the development of procedures for the measurement and reporting of impacts on natural capital, which could help to ensure that our natural assets are not over-exploited at public expense at the same time as contributing to the long-term business viability and robust supply chains.

However, as it stands, the NCC will cease to exist at the end of this Parliament. This will curtail the important work on the state of our natural capital. Instead, its future should be assured by adopting the NCC's recommendation of a 25-year plan for natural capital and setting the NCC on a legislative basis, so that analysis of the state of our natural capital and strategy to drive its growth becomes a fundamental plank of government decision-making.

The NCC's successor should be established as a permanent, statutory, independent, arms-length body (an advisory non-departmental public body) to ensure the restoration of nature and the sustainable use of our natural resource base. Such a body would advise and provide an oversight function to HM Government on new policies required to meet our long-term objectives for restoring our natural environment and should include consideration of the impact of policies domestically and our impacts on the global environment, especially in the UK's Overseas Territories. It should also ensure that monitoring and data sets of the status of the natural world are collected rigorously and sufficiently to allow future legislation and action to be founded on and responsive to good evidence. This role will allow proper scrutiny of the effectiveness of the legal framework, and the impacts of emerging threats, such as from climate change, to be addressed. It must hold the Government to account for its delivery of nature's recovery.

This body could be constituted in a number of ways, but its essential purpose is clear. One option would be to create a new Office of Environmental Responsibility (OER), with a range of new essential duties and responsibilities. Another is to vest the NCC with a new, wider set of statutory duties/responsibilities (after it finishes its three-year term in early 2015). In Wales, the Future Generations Bill would create a Commissioner for Future Generations, with some of the powers and responsibilities needed to hold the Government to account.

The OER or NCC+ would be relatively low-cost to create and maintain. The Committee on Climate Change operates with 30 people, the Office for Budget Responsibility with 24 people and the NCC with eight people, plus a small secretariat. Yet this kind of scrutiny would help to improve decision-making and public value across government.

In order to operate effectively, the new body should be vested with cross-departmental authority, so that the impacts of decision-making in every department are weighed against the common objective of restoring nature for the next generation – this is not an optional add-on.

We recommend that a Nature and Wellbeing Act should introduce:

- The establishment of the NCC or an OER in law, with new powers to:
  - scrutinise the environmental impact of new laws,
  - propose new policies for incorporating the value of nature in decision-making
  - exercise oversight of national natural capital accounts, to be published annually by the Treasury, and
  - ensure that sufficient monitoring and data sets of the status of the natural world are collected rigorously.

CHAPTER 5

CONNECTING PEOPLE WITH NATURE

People are increasingly disconnected from nature and this is having an impact on health and wellbeing, especially for the poorest and most vulnerable people in society.

The *Natural Environment White Paper* recognised the need to improve connection to nature through education and natural green spaces, but we require new initiatives to bring this to fruition.

The Nature and Wellbeing Act would introduce two reforms to improve our connection to nature. One would focus on providing more accessible natural green space near our homes, while the other would ensure that connecting with nature is a core part of the learning of all children throughout their years in education.

5.1. Access to green space

Having nature nearby is good for people, good for wildlife and good for the environment, yet many people in both urban and rural areas do not have access to high-quality, natural green space. For example, in Hertfordshire only 36% of households have access to an accessible natural green space of at least two hectares (ha) within 300 m of their home.[70]

Many local authorities, statutory nature conservation bodies and others work with developers to provide green infrastructure, particularly in areas of new housing. However, many people are still left isolated from green spaces, especially the poorest and most vulnerable in society.

In England, the most deprived communities are 10 times less likely to live in the greenest areas. Income-related inequality in health is related to the extent of exposure to green space. Those with close access to green space live longer than those with no green space, even when adjusted for other factors like social class, employment and smoking. The psychological benefits of green space increase with biodiversity.[71] The impact is significantly greater amongst the least well off.[72]

Recent evidence shows that access to natural green spaces for fresh air, exercise and quiet contemplation has benefits for both physical and mental health. Research provides good evidence of reductions in levels of heart disease, obesity and depression where people live close to green spaces.

Natural England. http://www.naturalengland.org.uk/regions/east_of_england/ourwork/gi/accessiblenaturalgreenspacestandardangst.aspx

Natural England has recognised the importance of "nature nearby" and has published a set of standards (known as Access to Natural Green Space Standards, or ANGSt) targeted at planners, decision-makers and managers of green space.[73] This is designed to communicate the minimum extent of green space that our developments and settlements should contain to ensure that all communities have access to natural green space close to their homes.

This is so fundamentally important to our quality of life – rich and poor – that the Government should go further and commit itself to increasing the extent, accessibility and quality of natural green space in and around our settlements. This commitment would be delivered at the local level.

This requirement would be straightforward to introduce for all new developments and go far to raising the quality of settlements being created across England. It would also challenge local authorities to work with communities, developers and other stakeholders to find ways in which to retrofit existing settlements with increased levels of accessible natural green space over time, as opportunities arise.

In urban areas, it may not be possible to provide major new green spaces in the short term, but we can make sure that when planning or spending decisions are made, the benefits people derive from a healthy environment are taken seriously. The key in the short term would be to improve access and quality. There is no use having a park if people are separated from it by a dual carriageway with no footbridge, nor is "green space" delivering its full benefits if it is just a

patch of grass covered in litter and dog mess. Local authority spending on open spaces was cut by an average of 10.5% between 2010/11 and 2012/13, but improving access and quality of green space is a low-cost way to broaden the benefits of access to nature in cities. Access and quality are also important in rural areas. In fact, recent research suggested that children and families in urban areas felt more connected to nature. Sometimes, in rural communities, busy roads or private land can separate children from accessible good-quality green space.

The provision of new or improved natural green space would, of course, overlap with and contribute to the creation of ecological networks in local areas and provide a very important mechanism through which to increase the presence of wildlife in our villages, towns and cities whilst also providing greater opportunities for outdoor recreation in natural spaces, improving the connection between people and nature.

We recommend that the Nature and Wellbeing Act should introduce:

- **A commitment by government to increase the extent, accessibility and quality of natural green space in all settlements.**
- **A duty on the Secretary of State to set targets for the provision of natural green space to a minimum standard in all settlements and provide guidance on how these targets should be met.**
- **A duty on local planning authorities to aim to ensure that every household within the local authority area has a level of access to natural green space that complies with the targets set by the Secretary of State.**
- **A requirement for Government to report to Parliament on progress against natural green space targets.**

The natural environment becomes degraded when people lose their sense of contact with it. Human health and happiness also suffer. This White Paper aims to strengthen connections between people and nature, to the benefit of both.

The Rt Hon Caroline Spelman MP, Secretary of State for the Environment in the Foreword of The Natural Environment White Paper, 2011

5.2. Growing up with nature

Nature is in trouble, and children's connection to nature is closely linked to this. Not only can children take action to help improve the state of nature, but they will also benefit from having more contact with the natural world. We believe that connecting with nature should be a part of every child's life, to develop deeply-held feelings and attitudes towards wildlife and the world we all live in.

Recent research has found that "...connection to nature is a strong predictor of children's interests in environmentally-friendly practices...".[74] If children are connected with nature, they are more likely to be interested in their environment and in taking part in nature-based activities. In other words, by connecting children with nature, they will enjoy it and want to save it, now and in the future.

Without the opportunity and encouragement to get outdoors, learn about and connect with nature, today's children are missing out on many benefits that previous generations have enjoyed. As well as harming children, this is putting the future of our nature and environment at risk. And we are missing out on a "workforce" for saving nature – children and young people themselves can be active in nature conservation. Action by children and young people also leads to their becoming more engaged citizens. At a time when pressures on public spending are likely to continue to constrain delivery, the power of communities and individuals to harness enthusiasm for nature and take practical conservation action is likely to be as important as ever.

When young people are connected with nature, it has positive impacts on their education, physical health, emotional wellbeing, and personal and social skills, and helps them to become responsible citizens.

In 2010, the RSPB's report *Every Child Outdoors* brought together the latest research into the benefits of contact with nature.[75] The key findings were:

- **Education**: "First-hand experiences...can help to make subjects more vivid and interesting for pupils and enhance their understanding...[and] could make an important contribution to pupils' future economic wellbeing and preparing them for the next stage of their lives".
- **Health and wellbeing**: "Children increase their physical activity levels when outdoors and are attracted to nature...All children with ADHD [Attention Deficit Hyperactivity Disorder] may benefit from more time in contact with nature...".
- **Personal and social skills**: "Experience of the outdoors and wild adventure space has the potential to confer a wide range of benefits on young people...Development of a positive self-image, confidence in one's abilities and experience of dealing with uncertainty can be important in helping young people face the wider world and develop enhanced social skills".

If children do not have a connection to nature, they may be missing the many positive impacts it can make on their lives. The effects of disconnection may include lower achievement at school, poorer mental and physical health, or underdeveloped social skills.

To describe these negative impacts, American author Richard Louv coined the term "nature-deficit disorder" in his book *Last Child in the Woods* published in 2005. He defines nature-deficit disorder as "the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of emotional and physical illnesses".

Recent RSPB research supported by the University of Essex and the Calouste Gulbenkian Foundation measured UK children's connection to nature for the first time.[76] Importantly, it found that currently only 21% of 8–12 year olds in England have a level of connection to nature that we consider to be a realistic and achievable target for all children. This research adds to the growing evidence base about children and nature.

Not surprisingly, the reasons why our children are disconnected from nature are complex and vary between individuals. As a result, there are a range of policy and practical solutions to increasing children's connection to nature and their participation in pro-nature lifestyles. Everyone has a role to play in putting nature back into childhood, including governments, local authorities, schools, families and, of course, organisations like ours.

However, given that nearly all children attend school, the formal education system provides a realistic legislative avenue for increasing their connection to nature (through directly influencing their knowledge about – and experiences of – nature). This would be best achieved through amending the Education Act 2002 to include a purpose for all schools in England to instil an ethos and ability to care for oneself, others and the natural environment, now and in the future, as part of a balanced and broadly based curriculum.

Table 2: Research identifying four factors that contribute to connecting children with nature:

Factor	Findings from Cheng and Monroe (2012)[74]
Experiences of nature	"spending more time in nature helps children develop a stronger connection to nature."
Knowledge about the environment	"environmental education opportunities that increase children's knowledge and skills for solving environmental problems may help promote pro-environmental actions."
Nature near the home	"[...there is] a significant correlation between children's connection to nature and nature near their homes."
Attitudes toward nature at home	"...family values toward nature are a strong factor that can influence children's connection to nature."

In 2011, the Coalition's expert panel on national curriculum reform proposed that that "the Government considers a recommendation that the school curriculum should also contribute to environmental 'stewardship'". That expert panel also noted that "in a democracy, it is right and proper that the public and their representatives should debate the contribution that schools should make to society, given the public investment made in them" and recommended that "a statement expressing the contributions of education to national development should be published and debated in a public consultation". It added that "the school curriculum should develop pupils' knowledge, understanding, skills and attitudes to satisfy economic, cultural, social, personal and environmental goals". Specifically, on the final goal, it should "promote understanding of sustainability in the stewardship of resources locally, nationally and globally".[77]

We must help increase children's connection to nature, by providing adults and children with access to natural green spaces, a better understanding of our natural world, and new opportunities to take action to save nature. We note the work of The Wild Network, which exists to champion and support connection with nature and wildness in children and young people. This is an exciting movement whose goal is to connect every child in the UK with nature.

We recommend that the Nature and Wellbeing Act should introduce:

- An amendment to Section 78 of the Education Act 2002 to include learning to care for the natural environment as a requirement of "a balanced and broadly based curriculum" for all schools in England.

CONCLUSION AND RECOMMENDATIONS

We should protect our wonderful wildlife and habitats for their own sake, but we should also invest in nature for the benefits it brings us.

This Green Paper demonstrates how the state of nature is inextricably linked to the state of our economy, our communities, our health and our wellbeing. Turning around the decline in our natural environment will contribute to many of our most important societal objectives.

Our national and European conservation legislation remains essential for safeguarding our most precious sites and species and we should continue to strive for their protection and full implementation.

However, to turn around the decline in our natural world, it is clear that we need new laws to lock in a long-term trajectory for restoring nature, combined with new ways of valuing nature, restoring nature from the local level up, and connecting people with nature.

We recommend that all parties should commit to introduce a Nature and Wellbeing Act.

The Nature and Wellbeing Act should introduce:

A long-term commitment to restore nature

- A statutory commitment to restore nature in England within a generation.
- Specific targets for nature's recovery, including:
  - A 10% increase in the species Watchlist indicator by 2040
  - At least 80% of Sites of Special Scientific Interest (SSSIs) in favourable condition by 2040
  - Alongside targets for biodiversity and site condition, targets could also be set for particular natural capital assets (developed through the work of the Natural Capital Committee (NCC)) and people's connection to nature, once the necessary evidence and methodologies were developed.

A requirement to develop Local Ecological Networks

- A requirement for DCLG and DEFRA to create a national ecological network built at the local level, and knitted together across administrative boundaries. This would include guidance for local authorities on how to identify, map and deliver an ecological network, to ensure a consistent approach across England.
- A reporting requirement to ensure that Parliament is kept informed of progress towards the creation of the national network.
- A duty on local planning authorities to identify, map and embed local ecological networks in local plans. Networks need to be woven into a wide range of local policy and investment decisions, from the design and location of new housing, flood alleviation, preventative health delivery to outdoor education, recreation and job creation.
- A duty on all relevant public bodies (including Natural England, Environment Agency) to contribute to the planning and delivery of local ecological networks, as part of their strategy towards fulfilling both national objectives for nature and the wider social objectives related to the services that local ecological networks provide.
- A duty on the Secretary of State to list species threatened with extinction.
- A duty on the Secretary of State to identify and publish the actions needed to improve the status of species threatened with extinction.
- A requirement to report to Parliament on the status and trends of all listed priority species and to review the list on a regular basis.
- A system to encourage the local support for and targeting of action to recover nationally threatened species.

An independent body to ensure the value of nature is integrated in decision-making and to hold the Government to account

- The establishment of the NCC or an OER in law, with new powers to:
  - scrutinise the environmental impact of new laws,
  - propose new policies for incorporating the value of nature in decision-making, and
  - exercise oversight of national natural capital accounts, to be published annually by the Treasury.

Access and education to connect people with nature

- A commitment by Government to increase the extent, accessibility and quality of natural green space in all settlements.
- A duty on the Secretary of State to set targets for the provision of natural green space to a minimum standard in all settlements and provide guidance on how these targets should be met.
- A duty on local planning authorities to aim to ensure that every household within the local authority area has a level of access to natural green space that complies with the targets set by the Secretary of State.
- A requirement for Government to report to Parliament on progress against natural green space targets.
- An amendment to Section 78 of the Education Act 2002 to include learning to care for the natural environment as a requirement of "a balanced and broadly based curriculum" for all schools in England.

Annex 1. Analysis of four reforms within the *Natural Environment White Paper (NEWP)* for protecting and improving our natural environment

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Supporting Local Nature Partnerships, to strengthen local action (paragraphs 2.15–2.26);

Local Nature Partnerships are poorly funded and sit on the periphery of local economic and development related decision-making processes. They lack clout to bring about change and are generally a weak intervention. Where they have been delivering useful results, this is as a result of existing partnership initiatives that are already well established locally. But their impact is not consistent across the country.

New Nature Improvement Areas in response to the recommendations set out in Making Space for Nature, to enhance and reconnect nature on a significant scale (paragraphs 2.27–2.32);

Nature Improvement Areas, as envisaged in the Lawton Review (as Ecological Restoration Zones), would have provided a spatial and strategic mechanism for targeting effort and resources on areas of nature most in need of improvement and enhancement.

However, the approach within the White Paper failed to identify these areas in a strategic manner – or to provide the political emphasis to embed them in planning or other decision-making processes. Individual NIAs are making a difference: in the first year, just £7.5 m helped to leverage an additional £40 m in both cash and in kind contributions. However, they were allocated based on local commitment and readiness to act, rather than ecological need. As an intervention they were not designed as a nationally strategic tool to focus resources on where nature or people need them most.

Ecologically coherent planning, retaining the protection and improvement of the natural environment as core objectives of the planning system (paragraphs 2.33–2.37);

The concept of "**ecologically coherent planning**" is welcome, yet the NEWP lacks the imperatives to make this happen in practice. The **National Policy Planning Framework (NPPF)** does contain clauses in support of this approach and makes specific reference to the creation of ecological networks. However, in practice, activity in this area in local authorities across the country has been patchy at best. In addition, the components of ecological networks outside already designated areas have no statutory protection and are left vulnerable in the face of other priorities for the use of the land they occupy.

Piloting biodiversity offsets, to make requirements to reduce the impacts of development on biodiversity simpler and more consistent (paragraphs 2.38–2.42);

For biodiversity offsetting to deliver positive benefits for nature, it requires a very clear purpose, must be mandatory, respect the existing mitigation hierarchy (which places the emphasis on avoiding and reducing impacts), capture currently unaddressed losses, and be delivered in a spatial and strategic way. It is also important that lessons from the offset trials are fully incorporated into any future proposals.

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[1] The RSPB

The RSPB is the country's largest nature conservation charity, inspiring everyone to give nature a home. Together with our partners, we protect threatened birds and wildlife so our towns, coast and countryside will teem with life once again.

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[2] The Wildlife Trusts

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