



giving
nature
a home

Futurescapes

UK





Foreword

For more than a decade, the RSPB has been at the forefront of restoring some of our most iconic wildlife habitats. The purple haze of heathland in Dorset, vibrant wetlands in the Fens, parts of our beautiful coast and the remote and haunting peatlands of Caithness and Sutherland are just some examples. The list of our partners, funders and friends makes for an impressive roll call. Between us, we have started to stitch together the tattered fragments of our natural environment.

It's a good start. But the challenges grow, and the new agenda is being set by a wide range of issues. These include adapting our landscapes to a changing climate to give birds and other wildlife the space to move and establish new ranges, and protecting the natural systems that give us our soil, clean water, natural defences against damaging floods and a host of other ecosystem services. What is absolutely clear is that the task is well beyond any single organisation. Futurescapes is the RSPB's distinctive framework for contributing to the revolution in landscape-scale conservation that is needed to meet the challenges of the 21st century.

At the heart of any successful conservation initiative are the people who make it happen. Forging partnerships, and developing a shared understanding and passion to shape a better future for us and the natural world that shares our pressured islands are all characteristics of the Futurescapes approach.

One of my favourite places is Lakenheath Fen – it's an RSPB nature reserve. Fifteen years after we started to restore these wetlands, bitterns now boom and cranes rear their young. My pride in our achievements at Lakenheath is matched by a realisation that it is nowhere near enough; standing in the centre of the reserve it seems the reeds and pools are timeless, and yet they are a minute part of a larger landscape where nature is now harder to find.

Here in the UK and across the world we missed a vital target in 2010 to stop wildlife losses. The target has been reset to 2020 (with international agreement); the price of failure is an increasingly impoverished landscape where islands of wildlife richness exist only in nature reserves, denying future generations day-to-day contact with the natural world.

Futurescapes is a vision we want to share and deliver in every corner of the UK. Not everything will happen at once. This is the start of a new love affair with our precious landscapes – a collaborative effort to give nature a home.

Mike Clarke

Dr Mike Clarke
RSPB Chief Executive





The RSPB's Futurescapes programme is working for a thriving countryside cherished by all.

Futurescapes in a nutshell

A new approach

The Futurescapes programme represents the RSPB's commitment to working for conservation on a scale never seen before. Nature needs us to move beyond the preservation of reserves and protected areas. We need to look to the wider countryside, restoring and recreating living landscapes in which birds and other wildlife will thrive.

We can't do this alone – and the partners we work with have never been more important. In selected areas around the UK, we're working together with fellow environment organisations, local communities, businesses and government bodies to realise a vision for a countryside rich in habitats and diverse green spaces – not just for wildlife, but for people too.

The challenge for wildlife in a changing countryside

Decades of habitat loss have left our most threatened and vulnerable wildlife species clinging to a precarious existence in areas that need special protection. And even our more widespread species have undergone dramatic declines, as the broader fabric of the countryside fails to meet their food and shelter needs. We have yet to halt biodiversity loss, and the 21st century holds many more challenges for wildlife. The UK cannot now avoid the consequences of significant climate change. We can see the effects already, and we know that they will grow.

Thinking big for nature

However hard – and well – we've worked together in the past, the fact is that current conservation effort just isn't enough. Species decline and loss is still happening, and wildlife will need even greater protection to meet the challenges of the future. We need to give nature more space – but how? While we can, and must, make key wildlife habitats bigger and more resilient, we also need to find ways to factor in the needs of wildlife alongside our own, important uses of the countryside – for example, agriculture, forestry, housing, water management and recreation. We need to learn how to make the best of our land for multiple objectives, even if that sometimes means a change in current uses.

But it will not just be nature that wins. By taking a landscape-scale approach for birds and other wildlife, people will benefit from other natural services the land can provide. Depending on the site, these could include carbon storage and flood protection, an increase in quality food production and greater potential for recreation and tourism.

Our key objectives

Futurescapes is a big, bold, ambitious project. It has to be, if nature is to hold its own against the challenges it faces. Together we aim to:

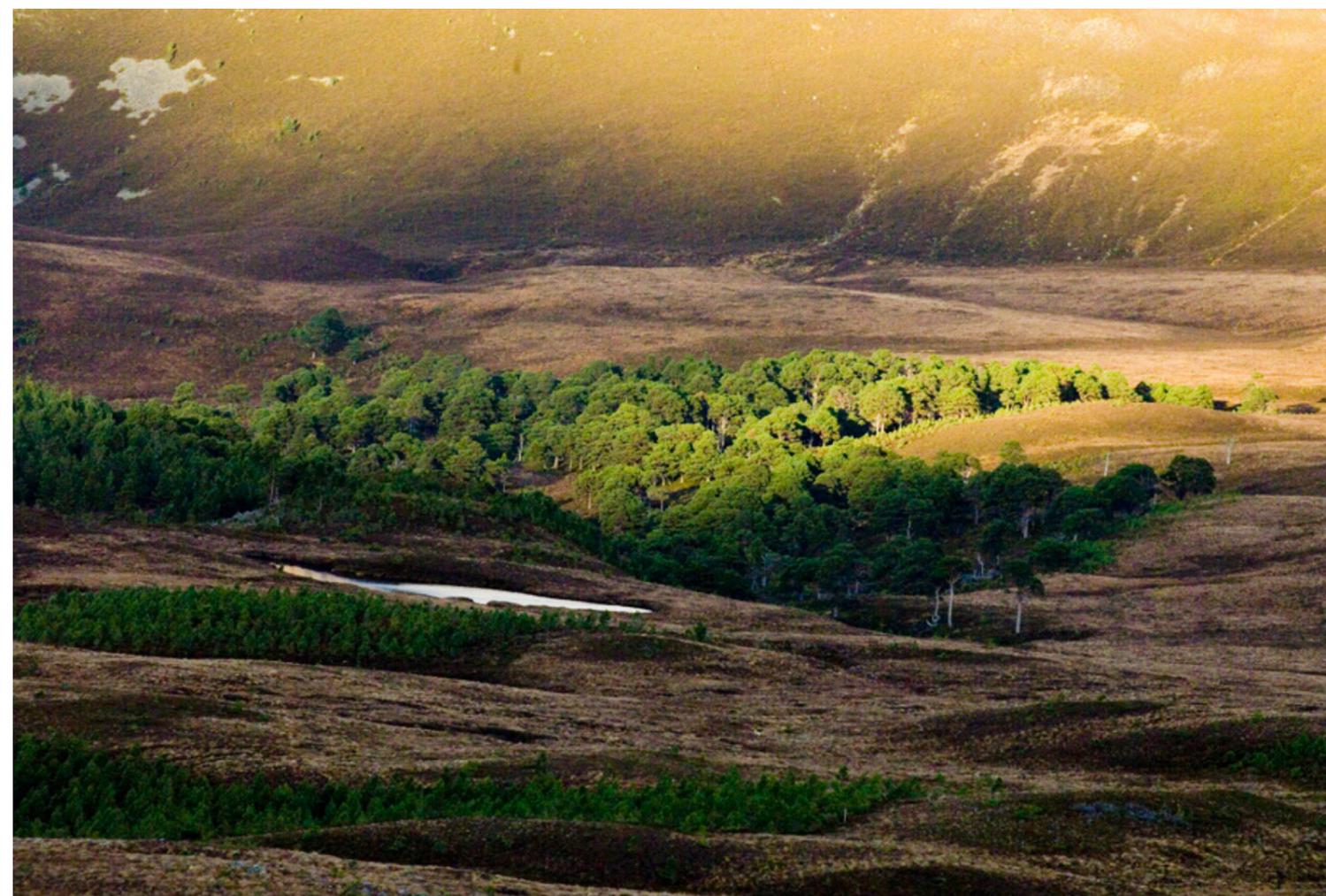
- ▶ Build partnerships among the RSPB and other environmental groups, local communities, the private sector and government bodies to develop a shared vision for a countryside that's great for people, birds and wildlife – and then work together to deliver it.
- ▶ Create more space for nature, by working to increase the size of areas managed primarily for nature conservation.
- ▶ Ensure the wider landscape is managed in such a way that nature finds it easier to adapt to climate change – by making habitats more resilient, and by enabling species to move more easily in response to climate change pressures.
- ▶ Put a home for nature on the agenda for any new initiatives and plans for land use, such as bioenergy production and infrastructure development.

There are more than 80 Futurescapes initiatives planned around the UK and amazingly, at nearly half of these places, the programme is already up and running. All over the country, from the Flow Country in the far north of Scotland to Wiltshire Chalk Country in south-west England, we're working together to integrate sound environmental stewardship with countryside management and planning for tomorrow.

Government action now

Government support is crucial if the Futurescapes initiative is to realise its full potential. Specifically, we call on the UK and devolved Governments to:

- ▶ Recognise the importance of the landscape-scale approach to nature conservation to build on and complement work on protected areas and targeted species conservation. To take the intellectual lead in driving forward this approach, at the UK level and in the devolved nations.
- ▶ Ensure appropriate policy and planning frameworks are in place to facilitate landscape-scale conservation.
- ▶ Introduce innovative mechanisms for funding landscape-scale conservation, make existing funding mechanisms work harder for wildlife and ensure that public spending does not have negative impacts on the natural resource base.
- ▶ Pilot their own landscape-scale initiatives and share learning with others.





The basics

Nature conservation is a long-term game. We have to look ahead to make sure the coming generations enjoy and love birds and other wildlife as much as we do. Predicting threats, and working together to find ways to counter them, is vital to ensure that nature has a home here in the future.

When it comes to nature conservation, business as usual is not an option. Our birds and other wildlife are under huge threat. Every single year, two species become extinct; nearly 500 have died out in England in the past two centuries. There have been successes, to be sure, where conservation efforts and reintroductions have been focused on particular species under threat. But even familiar and once-widespread creatures such as common frogs and toads are now in decline. We know that in nature, everything is connected, and even the most insignificant-looking species could be vital to the existence of many others. And when we look at this bigger picture, we have to face the fact that we are failing to halt biodiversity loss at a time when nature faces ever-greater threats from a changing climate and increasing pressure on land.

We must turn this into an opportunity. In many parts of the UK, habitat-rich wildlife areas have been reduced to small islands in a sea of inhospitable land. We must reverse this trend, and reclaim wider landscapes for nature; give birds and other wildlife space to thrive and move about our countryside, building up their numbers once again to stable levels.

The Futurescapes programme is our most ambitious answer yet to this challenge. It's a new way of delivering nature conservation, on a bigger scale and in a more integrated way than ever before. It's also an invitation to other organisations and individuals to join us and our existing partners, as together we create, restore and improve habitats across the UK. The programme is about real improvements on the ground, making a real difference for the natural environment.

Why we need concerted action

At the RSPB, looking at things on a landscape scale is not new. We have long been advocates for large-scale habitat work, putting our ideas into practice on and around flagship reserves – including Abernethy, Forsinard Flows, Minsmere and Lakenheath Fen – for years. We first set out the case for what would become the Futurescapes programme in 2001, and today, ground-breaking, integrated conservation work is already well underway at around 40 Futurescapes locations. But in the intervening years, significant government targets to halt biodiversity loss have not been met. It's clear that we need to think bigger than we envisaged even a decade ago if we are to redress this failure and give nature a fighting chance.

We need to learn new lessons – how to carry out specialist conservation work across wider landscapes; how to provide more space for nature to thrive and adapt to a changing climate; and how to influence current and future land use in nature's favour. The increase in scale entailed by the Futurescapes programme is huge. Current RSPB reserves cover some 150,000 hectares (ha), but just 50 of our 80 Futurescapes encompass nearly 1 million ha of land. These are all locations where our long experience as conservationists and land managers tells us we can make the biggest difference for nature.

It's a vast step-change – and that's why our partnerships with other organisations and landowners are so essential. The range of these vital working relationships is already impressive, right across the UK, and we will continue to seek out others who want to work together with us, pooling skills, resources and knowledge to build a better future for nature.

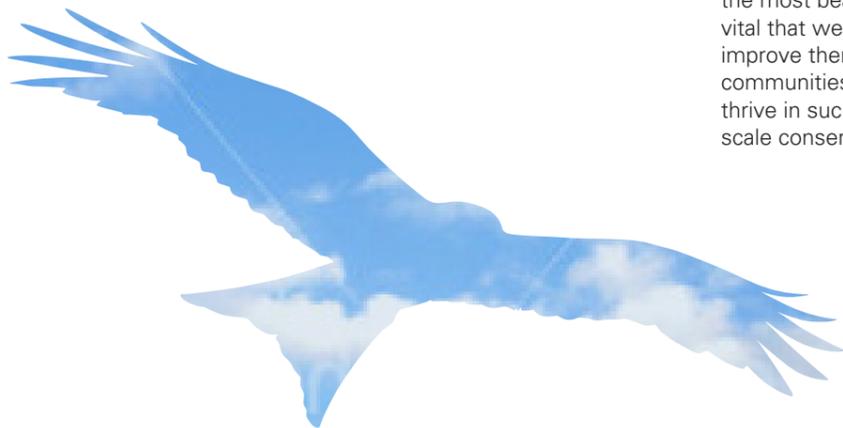
Governments must also acknowledge that their collective failure – to halt biodiversity loss by 2010 – is a wake-up call that cannot be ignored. Turning the tide of biodiversity loss will not be easy, and calls for genuine political leadership. Landscape-scale conservation needs concerted governmental support to make it happen. The challenge for UK governments, NGOs and other organisations is clear: we must work together, supported by adequate policies and funding, to create a countryside fit for wildlife and for people, now and in the future.

Nature conservation in the 21st century

The building blocks of nature conservation have been painstakingly assembled over the last 30 years and, as the country's largest nature conservation charity, the RSPB has been involved in many of them. If these blocks are strengthened, we can use them as the foundation for a bigger, bolder, 21st-century approach – in other words, for landscape-scale conservation work.

Thanks to decades of dedicated work by individuals and organisations, we already have some impressive systems in place to conserve nature. Legal protection for important wildlife sites supports the statutory duties on our nature conservation agencies to protect species and restore habitats. Agri-environment schemes to improve conditions for wildlife on farmed land, and a range of vital privately-funded efforts, led by conservation organisations, are also helping threatened species recover their foothold in damaged environments.

All of these can provide a framework on which we can build and work together towards landscape-scale conservation. But such a framework needs to be strong. Together with our partners, we're doing everything we can to identify weaknesses in our present system, and work out how we can remedy them.



Targeted intervention – a vital first step

The landscape we see around us today is the result of thousands of years of human intervention. But it's only in the last two centuries or so that industrialisation and the needs of a rapidly-growing population – food, water, housing – began to put ever-increasing pressure on our countryside. What remains of our natural landscape today are tiny, highly-fragmented remnants; in essence, small islands of habitat. Even the expanses of semi-natural habitat that accompanied old-style farming eventually succumbed to the squeeze. Once we realised that some cherished species dependent on these habitats were desperately struggling to survive, it's perhaps no surprise that we focused our conservation efforts on these species and their localised sanctuaries. Specific programmes to save some of our most beautiful and valuable creatures, such as bitterns, stone-curlews, curlew buntings and red kites, have had brilliant results, and targeted species recovery goals will always be a vital part of conservation work. However, declines in birds and other wildlife dispersed across the wider countryside have yet to be successfully tackled. Unless this happens, the numbers of red-listed species of conservation concern across the UK can only rise.

Reassessing the needs of protected areas

The UK's network of protected areas is an essential part of the species recovery toolkit. But we must remember that these spaces were designated at a time when the wider countryside was in a much less impoverished state. As our protected areas have become ever more isolated, nature has suffered: birds and other wildlife need to be able to move around the landscape if they are to build up viable populations. These protected locations represent the most beautiful and precious spaces in the UK, and it's vital that we continue to work together to safeguard and improve them. But they must not become "gated communities" for birds and other wildlife: nature cannot thrive in such an environment. By adopting landscape-scale conservation goals, we can stop this happening.



Bittern

The role of protected areas

Our protected areas are a cornerstone of nature conservation in the UK. They comprise sites not only of national importance: our Sites of Special Scientific Interest (SSSIs) form part of a much wider network of the most important places for nature in Europe. These are the Natura 2000 sites, and included in these are Special Protection Areas (SPAs), designated under the EU's Birds Directive, and Special Areas of Conservation (SACs), designated under the Habitats Directive.

Recent work looking at population trends for all wild birds since 1970 has shown how important the Birds Directive has been for them, especially those listed on Annex 1 (the most threatened and significant species in the European Union)¹. The rate of recovery of Annex 1 species has been significantly greater inside the EU than outside, and within the EU has been greater for Annex 1 species than those not listed².

The role of protected areas in this recovery has been critical. The greater the area of SPAs, the stronger the recovery, especially for the rare and vulnerable species on Annex 1. The facts speak for themselves: those countries with larger designated areas of SPAs showed population trends that were more positive.

As our climate continues to change, protected areas will play an even more important role in ensuring a future for wildlife. Tomorrow's biodiversity can only come from today's, so the role of protected areas in improving the conservation status of species is a vital first step in enabling wildlife to adapt. Designating a site doesn't just protect the species that reside within it, but the underpinning environmental conditions or "site function" too.

What exactly does this mean? In a nutshell, many of our protected areas have been relatively undisturbed by human activity, and thus they have features such as low-nutrient soils, high water quality, and geologies and topographies that are now rare in the wider, managed landscape. Habitats like these are not only the foundation of diverse ecological communities, but their future, too. They provide unique and stable environmental conditions that allow the species that make up those communities to alter and develop naturally with time.

For these reasons, the protected area network will be central to the Futurescapes approach. While protected areas are at the core of all Futurescape initiatives, identifying the opportunity to support wildlife over a wider landscape does not imply or signal a new tier of designation.



Water vole

“Increased funding, delivered across a broader framework, would enable conservation organisations, farmers, landowners and communities to work together.”



Environmental legislation

Over the last 30 years, legislation has made a huge contribution to the conservation agenda. We’re fortunate to be working within a wider society that not only recognises its ethical duty to protect nature, but enshrines that duty in law. The EU’s Birds and Habitats Directives, and the Wildlife and Countryside Act, CROW and NERC Acts passed under successive UK Governments, have all set out safeguards for nature. Together they limit the degree to which human activity can be allowed to impact on the natural environment, and assign responsibilities for its protection and restoration.

But even with this support, our birds and other wildlife are facing threats on a never-before-seen level. If this trend is to be reversed, we must make our legislative toolkit work harder, and extend its scope – for example, to cover the creation and restoration of habitats outside the protected area network. Targets for important new legislation for nature, such as the EU Water Framework Directive, are fast approaching, and we must ensure that we fulfil our responsibilities at a national level. Statutory duties to protect wildlife must be integrated into all regulation concerning land use; in particular, conservation concerns must be factored in at the earliest stage when changes in land use are planned. It is not only nature that will benefit: careful, early integration can help avoid conflicts, delays and increased costs as projects proceed.

Protecting nature in the wider landscape

Support for nature conservation outside protected areas forms a part of the Common Agricultural Policy (CAP), via the funding it delivers to agri-environment schemes. These schemes have valuable aims – increasing habitat for farmland birds, for example – but they have yet to realise their full potential. Not only is current funding inadequate, but because it is paid directly to farmers, its purpose is not clearly perceived. It is vital that this funding is seen not as compensation for losses in “productivity”, but as a means to deliver real, public benefits – for wildlife and for everyone. Increased funding, delivered across a broader framework, would enable conservation organisations, farmers, landowners and communities to work together – a powerful incentive for change in a countryside under threat.

And the results of such schemes must be more carefully monitored and quantified. Many are currently judged by how many participants they have, or how many hectares they cover. Success must be judged against clearer objectives. Which species have benefited, and how? Have targets for habitat recovery been met? Do local communities recognise any benefits from the scheme? Good project design and advisory capacity on the ground are essential to ensure public benefits are delivered. The RSPB’s working arable farm in Cambridgeshire, Hope Farm, has proven that wildlife-friendly yet profitable farming is possible – a model for success that we can learn from.

The climate challenge

Among the greatest challenges we face in managing the UK's landscape in the future is climate change. The threat that this poses to birds and other wildlife is clear: for every degree Centigrade that the Earth's average temperature warms, another 10% of our world's precious species are projected to be at higher risk of extinction³.

We cannot be in doubt now that global warming is taking place. And while average global temperatures have risen 0.8 degrees Centigrade since pre-industrial times, there is clear evidence that warming has gone farther and faster in some areas – and that includes the British Isles. In central England, average annual temperatures have increased by 1 degree Centigrade since the 1970s. Surface temperature in the UK's seas has risen by around 0.7 degrees since just 1980⁴. While that may not sound like much of a change, the impacts on wildlife are already significant.

Our warmer springs and hotter summers are causing some species to fall out of sync with their food sources. For instance, on upland moors, milder spring weather has encouraged golden plovers to nest earlier than they did 20 years ago. However, there is no longer enough food for their chicks to eat because craneflies, the mainstay of their diet, have not changed their hatching times. Moreover, hot summers are drying out cranefly eggs, leading to smaller populations the following year.

Warming seas are disrupting the marine food chain. The abundance and distribution of cold-water plankton is changing so that numbers of sandeels, which rely on the plankton, are falling. And with fewer sandeels to nourish them, puffins – surely one of the UK's best-loved birds – are suffering huge breeding failures.



Another frightening consequence for nature is habitat loss. On our coasts, sea levels have risen by 10 centimetres in the past century⁵, mostly due to seas' expanding as they warm up. Rising seas are reducing the areas of saltmarsh habitat on our coast – crucial feeding and breeding grounds for wading birds – and, in some cases, threatening human settlements. In just 10 years, 1,000 ha of coastal saltmarsh were lost in eastern England alone⁶.

Facing up to the future

Even if today's society musters tremendous political will, we can only limit, not halt, further climate change: greenhouse gas emissions in the past have already built rising temperatures into Earth's future. At a global level, future scenarios range from a further average temperature rise of 1.4 degrees Centigrade to 4 degrees or more. Uncertainty about the nature and scale of future change makes it hard to predict the consequences for wildlife, but existing studies suggest alarming trends.

Shifts in species distributions are the most studied, such as detailed in the *Climatic Atlas of European Breeding Birds*. Based on a scenario of mid-range emissions, this study predicted that, by the end of this century, suitable climatic conditions for the average bird species will have shifted nearly 550 km north-east; be reduced in size by a fifth; and overlap the current range by only 40%. In short, species will need to move in order to find the conditions in which they thrive. However, our birds and wildlife are already challenged by a landscape in which natural and semi-natural habitats have been severely eroded. Without our help, it's likely that some – especially those already in decline – will not be able to make that move in time.

This, then, must be our task: to work together to help birds and other wildlife adapt to changes in the climate that cannot be halted. We and our partners already have many projects underway to help wildlife adapt. For example, we are blocking upland peatland drains to aid water retention in the soil over the summer months, and we are creating new coastal saltmarsh habitats through managed realignment schemes. But even with such projects in hand, there are more challenging times ahead. Bolder action is needed.

“A warmer British summer and milder winter should encourage the Dartford warbler to spread here, but whether it flourishes is up to us.”



Dartford warbler

The story of the Dartford warbler perfectly illustrates the problems and paradoxes created by ongoing climate change. Far from threatening their status in the UK, our recent milder winters have spelt nothing but success for this perky little bird. From a breeding population of a scant few pairs in the 1960s, numbers have risen steadily, and today some 3,000 pairs make their home year-round in southern Britain's heathlands.

As the Climatic Atlas study predicted (see facing page), this is a bird that is shifting north in range as a response to climate change. While they are on the increase here, they are declining in Spain and Portugal, where the conditions no longer meet their needs.

However, it's not just the UK climate that suits them. They have settled here only because there are southerly parts of the UK, such as the RSPB's Arne reserve in Dorset, that can offer them the specialised lowland heath habitat they require. It's possible that they will flourish and spread northwards if UK temperatures continue to rise – but only if there are suitable areas of habitat available. The

birds may move north, but can hardly settle in a field of wheat. At our nature reserve at The Lodge in Bedfordshire, we are returning a dark conifer plantation to heathland, removing trees and planting heather and gorse over more than a square kilometre. Using our decades of experience at places such as Arne, we will create the largest heathland in Bedfordshire – a welcome patch for Dartford warblers to settle, as they expand north. This is just one example of a bird that we can support in a changing climate by making sure they can find a home in the habitat they need.



Growing pressures on our countryside

Our society will feel the pressure of new challenges in the decades ahead, and we will, in turn, place more pressure on the natural environment to meet our human needs. Demographic change will drive increased demands for food, housing, transport and recreational uses of land. It's vital that we don't overlook the needs of birds and other wildlife as we plan for the future.

In 2010, the Government's Foresight think-tank produced *Future Land Use: Making the Most of Land in the 21st Century*⁷. As this report detailed, the number of UK households can only increase, as people live longer, migrants contribute to our growing economy, more children are born and increasing numbers of people live in single-occupancy households. These pressures will be felt to differing degrees across the countries and regions of the UK, but everywhere, the trend is in the same direction.

Demands on our land are therefore bound to increase, and among the many challenges, securing food production could become a controversial issue. Not only a growing population, but also growing incomes and increased per capita consumption will drive up the UK demand for food, and changing consumer tastes could influence the type of food we want to buy. Future governments may let the market govern farmers' cropping choices, or they may introduce policy measures to favour certain crops – just as current policy incentives and government funding in Scotland are driving a rise in afforestation over the landscape.

In this country, land is a limited resource, and as policy attempts to address and balance our human needs, heated debates are likely to ensue. It's up to us to add a voice for nature to these debates, for without it, our birds and other wildlife will have no champions. We must ask: do we want to live in a country where our needs for food, housing, transport and other infrastructure are met, but nature does not have a home? As pressures grow on our countryside, it's essential that the needs of wildlife are incorporated into all future policy affecting land use, whether at EU, UK or devolved level.

Meeting our global promises

Our governments' commitments to mitigate against climate change will also have profound implications for the way our land is used and managed. The actions we take could affect wildlife dramatically. At the heart of the UK's climate change mitigation policy are its commitments to slash greenhouse gas emissions by at least 80% by 2050, enshrined in the UK Climate Change Act (2008) and in the Climate Change Act (Scotland) 2009. The RSPB campaigned hard for these targets, and we continue to press for medium-term emissions cuts in the UK of 42% by 2020 (the Scottish Government has already embraced this goal). But we argue that the policies to deliver these emissions cuts must be made in a way that respects our most important wildlife sites and provides habitat in the wider countryside.

Producing fuel crops for bioenergy, minimising the emissions associated with agriculture, developing renewable energy schemes, constructing low-carbon transport infrastructure – all of these necessary measures must be balanced carefully with the needs of wildlife and the natural world. Without proactive measures to conserve important species and habitats and provide sympathetic land management, landowners' responses to the climate crisis could inadvertently have a bigger negative effect on wildlife than climate change itself.

For example, without careful policy decisions and adequate funding, the drive to increase bioenergy crop production could lead to vast areas of the landscape being covered in monoculture plantations, with virtually no wildlife value. There could be the potential, instead, to develop many habitat features in a similarly productive landscape. The RSPB can demonstrate how we have worked with developers to produce renewable energy projects and cropping systems with specific features to create and enhance wildlife habitat. In other words, we have gathered a significant body of evidence to show that our society can do its part to mitigate against climate change while also protecting the natural world.

Helping nature to help us

As we plan ways to manage our cities, towns, countryside and coast in the coming decades, there are ample opportunities to develop solutions that benefit both people and wildlife. Adapting to future change in ways that improve people's economic security and recreation, while at the same time ensuring nature has a home, is at the heart of the RSPB's approach. That's because we understand that if we help nature, nature will help us.

Natural ecosystems provide humanity with a complex web of services that cannot easily be replaced. The land provides us, most obviously, with food, fresh water, fuel and genetic resources that support people's lives and livelihoods. It also enriches our lives, in the cultural, spiritual, recreational, aesthetic and educational uses we make of the natural environment. But there are less visible services that the land can provide us with too, ranging from climate and flood regulation to nutrient cycling. These are functions that would require vast budgets to replicate with man-made systems. In effect, they are gifts from nature, now and for our future, that it would be madness to ignore.

We can, and should, choose to approach land management in ways that reap maximum benefit from these "invisible" services. Coastal realignment, upland conservation and improved agri-environment schemes, for example, are all measures that can help nature to help us – and we and our partners are already working together on many such schemes.

Making a deal with nature

Managed coastal realignment schemes involve dismantling uneconomic flood defences, where concrete barriers have held back the sea to protect farmland, and returning these areas to the sea as important intertidal wildlife habitat. At our RSPB partnership coastal projects, we have seen saltmarsh flora return in an incredibly short time and, with it, a wonderful diversity of birdlife, ranging from avocets (at our southern and eastern realignment sites) to shelducks, pintails and redshanks (across our UK sites). In return, the resources saved in maintaining uneconomic defences can be diverted to protecting higher-priority coastal areas – including densely settled areas.

The RSPB has worked for many years with governments to develop agri-environment schemes that provide wildlife habitat in productive lands. With an eye to the changing climate of the future, we will be advocating that these schemes are geared to ensure that wildlife is helped to adapt to climate change, partly by using existing measures to strengthen and protect existing populations, and partly by developing new measures that address future needs, such as protecting wetlands from drying out.

A changing climate in the UK, with warmer springs, hotter summers and a longer growing season, will encourage farmers to grow new crops. These could range from growing maize further north into the UK, to introducing more exotic crops such as subtropical fruits. These crops will depend on wildlife for pollination, so if we want them to succeed, we must provide adequate space for insect habitat among them.

While all of these examples involve trade-offs in some form, the net result is a win-win solution for people and wildlife. As our demands increase in the future, we must remember the invaluable services the land can give us. If we want to continue to enjoy these benefits, then it's only fair that nature should have a say in the decision-making processes that determine how, and for whom, our land is managed – and it is up to us to give it that voice.





“This isn’t just about making the countryside better for wildlife – it’s about making it better for people too.”

Red kite

Landscape-scale conservation: from vision to action

Landscape-scale conservation is a big, bold approach to the current threats to birds and other wildlife and the challenges that society faces. We must act now to address the issues of habitat loss and fragmentation, the need to help wildlife adapt to climate change, and the imperative to adapt our natural and built environments to a changing climate, but in a truly sustainable way.

The landscape-scale approach embodied in the Futurescapes programme is designed to restore thriving ecosystems across the wider countryside, rather than just protecting limited nature reserves or sites. This means creating more habitats where remnant areas have become too fragmented to support precious species that depend on them – particularly important for heathland and woodland. It means restoring the hydrology of wetlands at a scale that allows for natural and sustainable water regimes, rather than having small verdant patches trapped by surrounding drained land. This is vital for water meadows, and the insects and breeding waders that rely on them. It means ensuring that a mosaic of habitats is put back, often integrated with other land uses such as farming, forestry or housing, that allows wildlife to move through a landscape and thrive within it.

This isn’t just about making the countryside better for wildlife – it’s about making it better for people too. It’s about a countryside where we can celebrate nature; a countryside that sustains the supply of food, materials and water that people need, now and in the future.

There are four important, practical ways in which we can begin to transform the future for nature in our country:

Get everyone involved

A thriving natural environment enhances people’s quality of life. But in order for people to benefit most from landscape-scale conservation, communities need to have good information about the options for nature conservation – big and small – in their area. They also need the opportunity to have a say on issues that affect them. A key aspect of the Futurescapes vision is to put community involvement and partnerships at the heart of decision-making about the future of the countryside.

Landscape-scale conservation must be presented to communities in a way that shows what the benefits are for people as well as for birds and other wildlife. Improved quality of life is hard to quantify; people need to know more, too, about the real, tangible value we derive from the ecosystem services provided by natural and semi-natural habitats in the UK. Add together the financial worth of reduced flood risk, better water quality, carbon storage and sequestration, health benefits, tourism and recreation revenues and education provision, and hundreds of millions of pounds is by no means an overestimation.

Decisions about rebalancing land management in nature’s favour often involve trade-offs. Restoring native woodland, for example, or allowing coastal land to flood and become saltmarsh once again, may involve taking some land out of production. That’s why it’s so important that stakeholders work closely together at the local level to ensure that concerned parties are consulted, and communities are involved in developing sustainable solutions for their area.

In addition, local people often play leading roles in conservation action, whether they are landowners or land managers, volunteers for conservation, business sponsors or local spokespeople and organisers. That is why partnerships among communities, government, business and civil society organisations are critical to implementing the Futurescapes programme.

Make more space for nature

We urgently need to increase the size of areas that are managed for nature conservation. There is so much evidence that shows that small, fragmented and isolated pockets of wildlife habitat cannot indefinitely support the species that depend upon them.

When it comes to nature conservation, size really does matter.⁸ Large sites almost always offer a greater variety of conditions for a wider range of species. They buffer sensitive landscape features and vulnerable species from external pressures such as pollution, and from some of the difficult climatic conditions we will come to expect, such as drought. For example, by making wetland sites larger and innovating ways to store and manage water, we can keep those places in better condition for wading birds, water voles, dragonflies and other wetland species as our summers become hotter and drier. Large sites also allow for more cost-effective management, making better use of natural processes, and they support species that require mosaics of different habitats or need to range widely to complete their lifecycles.

Help wildlife adapt to climate change

To date, targeted interventions on behalf of individual species in the greatest danger have not only been very successful, but also a cost-effective way of using limited resources. While Futurescapes is built around a broad vision for conservation, there will still be room within the programme for targeted, species-focused action (see also facing page).

Helping the natural world adapt to climate change is one area where this type of action can help. As well as making habitats more resilient by increasing the size of protected areas, we can make targeted interventions to help individual species cope. For example, we can develop ways to manage for stronger winds as weather events become more severe – another predicted effect of climate change. On grasslands, we can adjust grazing and mowing regimes to suit longer growing seasons and still provide the right grass height for breeding wading birds.

Studies predict that rising temperatures may force species to move north, but they will only be able to do so if they can find new homes, and a way to reach them. Our wider landscape contains so many barriers to movement: towns and cities, roads and railways, and intensively managed farmland and forestry with little by way of suitable habitat. A range of simple, practical measures can make the countryside better for wildlife and more conducive to species movement: these include reinstating once-familiar countryside features such as hedges, ponds, water-filled ditches, woodland and scrub patches, and unmanaged field margins, for example. Agri-environment schemes already include many of these measures, but they must be fully funded and available.

Put nature on the planning agenda

New pressures are set to squeeze our land resources. The measures needed to reduce our contribution to climate change could transform parts of our countryside. Westminster and Scottish governments are legally committed to ambitious targets for reducing greenhouse gas emissions and developing renewable energy. To meet these, a mix of renewable energy technologies, from onshore wind farms to new biomass cropping, will need to come on-stream in the next two decades. This will have profound implications for the way our land is managed.

We must put nature conservation at the heart of our response to new pressures on the countryside. With careful planning, siting and evaluation of wildlife impacts, sustainable technologies can be developed to protect and even to enhance benefits for wildlife. It is essential that they do so, in order to safeguard biodiversity for every generation, today and tomorrow.

Other pressures foreseen for the UK countryside – increased demand for agricultural production, housing, infrastructure and other developments – could, likewise, hold deep implications for wildlife. At the landscape scale, these developments must be planned strategically in a way that leaves adequate space and habitat to support thriving populations of wildlife.

While we can anticipate many of the challenges to our countryside in the future, the details – naturally – remain uncertain. The actual impacts of climate change, the response from wildlife and people to climate impacts, and other social and economic trends of the future, point only in the direction of contentious debates over the use of land, and a countryside where space for wildlife will be under strain. A landscape-scale approach to conservation helps create flexibility for people and wildlife to adapt to all these unknown pressures in the future.



Great yellow bumblebee

Restoring nature in a complex world

The RSPB advocates an approach that supports the ecological processes that drive the natural world, supplemented by targeted action for the species that are in greatest need of our help. Our ecosystems are too damaged, too fragmented and too small to rely solely on species responding to broad-brush measures. This risk is compounded by the uncertainties that are faced in relation to a changing climate.

We have been at the forefront of showing what can be achieved through targeted, well-researched, species-focused work. It is an approach distilled from all of our expertise, our experience and our history, and is central to our passion to ensure that we hand on to future generations a natural world that is in better condition than it is now.

The improving fortunes of avocets, ospreys, bitterns, corncrakes, red kites, white-tailed eagles, cirl buntings, stone-curlews, large blue butterflies, aspen hoverflies and great yellow bumblebees all demonstrate that species-focused conservation works.

Too often, the benefits of either a broad-brush or species-focused approach are posed as alternatives. We believe the solution lies in an intelligent combination of the two, delivering vital ecosystem support and restoration alongside effective strategies that deliver for both species and habitats. With adequate funding, legislative support and well-planned incentives, we believe that we and our partners can implement the landscape-scale approach that nature so desperately needs.

The RSPB's Futurescapes programme

We've chosen the name Futurescapes for our UK-wide programme of landscape-scale conservation initiatives. We believe it can build on our strengths, in partnership with others, to achieve a step-change in sustainable countryside management.

Our Futurescapes programme is based on our best current knowledge of what wildlife needs to thrive now and in the near future, and it aims to provide enough versatility to plan for both greater species movements and new human needs in the decades to come.

Futurescapes aims to contribute to a revolution in thinking and delivery of conservation, at a scale capable of making a real difference for nature. Our programme complements, adds to and supports a growing movement, including in particular the Living Landscapes programme led by the Wildlife Trusts and other initiatives from across the conservation community. All of them share a common vision: to see nature thriving in a landscape that provides healthy, high-functioning ecosystem services and supports rural industry – and one that continues to delight and inspire the millions of people who live in it and visit each year. The key lies in working together, to shape the future of a countryside fit for us all.

We have already identified our first Futurescapes locations, ranging right across the UK. At present there are some 40 sites, and this number is set to increase. At these sites, we are acquiring or expanding nature reserves, developing recovery plans for threatened wildlife and expanding our conservation management advocacy, both on the ground at farm and estate level and at local government level. All our current projects are in areas of the UK where the RSPB already has an in-depth understanding of local situations and where we are working together in strong partnerships that can ensure efficient and effective conservation measures are delivered.





Otter

England

The RSPB in England is working with a range of national and local partners to develop Futurescapes initiatives around the country. We have developed especially good links with Natural England, working together with farmers to increase the adoption of Higher Level Stewardship schemes. We are sharing our expertise with the Environment Agency at many sites to take the necessary steps for the Water Framework Directive. At Futurescapes sites across England we are in partnership with conservation organisations, local authorities, local businesses and local people to make space for wildlife and special places that we can all enjoy.

Morecambe Bay

The Morecambe Bay area is a natural candidate for a Futurescape. This is a richly diverse landscape in which RSPB reserves already protect some very special and varied habitats: limestone grasslands in which butterflies thrive, peat bogs sparkling with rare sundews, riverside reedbeds in which bitterns boom and, of course, the magnificent estuary itself. We're proud to be part of the Morecambe Bay Wildlife Network, a fantastic partnership project in which the RSPB is working together with government agencies, other conservation bodies, rural businesses and tourism initiatives to influence the management of over 90,000 ha of countryside.

We want to see widespread habitat restoration and improvement in wild places and on farmland to encourage those species that are key indicators of good water quality and healthy ecosystems. We believe that more sustainable, wildlife-friendly farming, associated with locally-branded produce and eco-tourism, will boost a diverse and vibrant rural economy – good for nature and for everyone.

Wiltshire Chalk Country

Chalk grassland is one of the richest UK landscapes for wildlife, capable of supporting over 40 species of wild herbs and grasses per square metre. It's a specialised habitat that suits some of our rarest birds, too, such as stone curlews and great bustards, and countless species of butterflies. But more than three-quarters of England's chalk grassland has been lost in the last century. As this habitat is destroyed and degraded, the birds and other wildlife that it supports will be trapped in ever-shrinking fragments of land, and their populations will dwindle.

Half of this habitat that remains – 18,000 ha – is in Wiltshire. The Wiltshire Chalk Country Futurescape project aims to re-create the largest network of chalk grassland sites in north-west Europe, connecting Salisbury Plain, Porton Down and the Stonehenge World Heritage Site, redressing historic losses and stitching together remnant fragments. The RSPB is carrying out one of the largest chalk grassland creation programmes in the UK at our 305 ha Winterbourne Downs nature reserve north of Salisbury. We are working with farmers and landowners to create new chalk grassland under Natural England's Environmental Stewardship scheme, and working closely with local conservation groups to restore and manage chalk grassland sustainably, including the Wiltshire Wildlife Trust's New Life for Chalk Grassland project.

Thames Estuary

Our Thames Estuary Futurescape perfectly illustrates the complex balancing act between human and wildlife needs that conservation must address today. We believe that balance can be achieved in this enormous Futurescapes project, which covers over 1,000 km², from Tower Bridge to the open sea. It's an area that includes well over 40 internationally and nationally protected sites for nature, and a haven for thousands of migrating birds. But it also serves one of the world's major capital cities, with over 70 wharves, terminals and port facilities and extensive recreational and educational use, as well as being the setting for national regeneration initiatives associated with the Thames Gateway, the London 2012 Olympics legacy and offshore wind farms.

Here, our partnerships are key to success and among them are a very strong working relationship with the Port of London Authority, Local Authorities and Regeneration partnerships, CLG, Environment Agency, Natural England, other NGOs and businesses. The Futurescapes vision for the Thames Estuary integrates biodiversity into the range of socio-economic activities crucial to the region. Working together, we aim to create a world-class home for nature for this world-class city.





Loch Leven

Scotland

Scotland's wild and wide landscapes comprise some of the most exceptional spaces for birds and other wildlife in our isles – areas of breathtaking beauty that support unique and complex natural webs of life. Our Futurescapes programme aims to keep them that way, taking action in the present so that every generation can enjoy these special places, now and in the future.

Even in Scotland's relatively underpopulated regions, nature is under threat. For decades, RSPB Scotland has been in action protecting and repairing habitat, not only in, but also around reserves at the heart of two Futurescapes, Abernethy and Forsinard Flows. Abernethy, perhaps best known for its Loch Garten ospreys, lies at the heart of Scotland's remnant Caledonian pinewoods, while the Flows sit in the middle of peatlands in Caithness and Sutherland that form the largest expanse of blanket bog in the world. Partnership work at these sites has resulted in massive gains for nature, from unblocking hill drains to restore 2,200 ha of peat bog to removing some 900 ha of inappropriate forestry.

The sheer scale at which RSPB Scotland has been working at these sites – among the most extensive conservation projects anywhere in the UK – gives it invaluable experience in advocating and delivering the Futurescapes vision, in a proposed 22 locations across the country.

Inner Forth

With its focus around the Firth of Forth SPA, this Futurescape includes areas of international importance for wintering wading birds and wildfowl. It also has a long history of industrial and agricultural use that has resulted in loss of valuable habitat over centuries. With new pressures from development, climate change and disturbance to the birds using the Forth, we need to act on a big scale to ensure nature in all its diversity continues to have a home here. Our vision is for landscape-scale habitat creation over 2,000 ha around the Falkirk and Alloa area: a network of new wetland habitats, including saltmarsh, mudflat and reedbed, with our Skinflats nature reserve at its heart.

This is a Futurescape location where a real win-win situation – for wildlife and for people – lies at the heart of the vision. The work involved in wetland habitat renewal will provide exciting opportunities for sustainable flood management, of immense benefit to local communities. In partnership with local authorities and land managers, we will be working together to maximise other socio-economic benefits. These include not only climate change mitigation, but a focus on recreational and educational amenities that will serve an area within easy reach of the majority of Scotland's population.

Living Loch Leven

At the heart of this Futurescape is the beautiful Loch Leven SPA. Just 30 minutes from Edinburgh, this is an important visitor destination, as well as supporting a rich diversity of birds and other wildlife throughout the year. The Living Loch Leven Futurescape will link enhanced conditions for nature with the economic redevelopment of the area, improving the quality of life for residents and providing a draw for visitors to stay in this accessible area. Sites previously used for mineral extraction will be recreated as wildlife habitat, particularly wetlands. Working in partnership with landowners, industry and national and local government agencies, other projects will contribute to improvements to water quality and flood management. Links to cities such as Perth and Edinburgh, with a focus on environmental education, will be at the heart of this Futurescape – a Living Loch Leven, for nature and for people.

Wales

Throughout the country, we're working with a range of national and local partners to develop our portfolio of Futurescapes sites. In particular, our collaboration with the Welsh Assembly Government and its agencies will be critical to developing a landscape-scale approach to conservation.



North Wales Moors

The Futurescapes approach is the perfect fit for this extensive mosaic of farmed, managed and wild landscape, in which so many local people and businesses have a stake. Decades of experience have shown us that here, landscape-scale conservation can sit comfortably with lowland and upland farming, sustainable forestry, tourism and other interests. Iconic birds and other wildlife here include species, like black grouse, that depend on skilful management of their habitats. Further afield, the water quality of many of the Severn area's major rivers depends on the health of these moors.

RSPB Wales works with many partners here, including the Countryside Council for Wales, Environment Agency Wales and Forestry Commission Wales, on a wide variety of projects. These include not only habitat restoration, but an extensive organic hill farm, run on behalf of Severn Trent Water, at our flagship reserve at Lake Vyrnwy.

Gwent Levels

The Gwent Levels is a wide, sweeping area of coastal floodplain, saltmarsh and intertidal mudflats of enormous ecological importance to the local area. Using wildlife as a driver for regeneration will deliver multiple benefits for water quality and flood risk management, working with the Environment Agency Wales and other partners. Improving the value of the habitats for birds and other wildlife will benefit not only nature, but also the quality of life for the people of Newport and visitors to the area.

Our Futurescapes programme aims to realise the potential that working in partnership can bring. The Newport Wetlands Environmental Education and Visitor Centre, run by the RSPB and developed in partnership with the Countryside Council for Wales and Newport City Council, will provide a focal point for this Futurescape.



Lake Vyrnwy



Redshanks

Northern Ireland



Lough Neagh and Lough Erne Basins

With its verdant countryside, fertile fields, superb farm produce and spectacular scenery, it's no surprise that agriculture and tourism are two of the most important creators of revenue in Northern Ireland. The Futurescapes vision here is to create a healthy, wildlife-rich environment based on sustainable land management, supporting the people who live and work in the area, and inspiring those who visit each year.

Loss of biodiversity – whether caused by the effects of climate change or by degradation of natural habitat – is a real and present threat to this vision. Conservation measures on a landscape scale are needed to preserve a vibrant, working countryside able to support secure, sustainable livelihoods – a living landscape in which nature and people interact to support each other.

Work is centred primarily on the Lough Neagh and Lough Erne Basins, working in partnership to halt biodiversity loss and mitigate against climate change, while seeking to deliver public benefits: improved water quality, premium food production and flood management. Our Futurescapes area covers nearly 5,000 km². It stretches from the North Atlantic coast to the Mourne Mountains in the south, and east to west from the edges of Belfast to the wetlands of Fermanagh. To deliver our Futurescapes programme, the RSPB is working closely with governmental partners and with farmers, landowners, industry, funding bodies, local community associations and other environmental NGOs.

As the largest freshwater lake in the British Isles, Lough Neagh is of incalculable value to birds and other wildlife, and to people too – it provides 40% of Northern Ireland's water supply. It has been described as one of the most important environmental resources in Europe, let alone the UK. Lough Erne comprises two connected lakes, formed by the widening of the River Erne. This tranquil waterscape of bays, peninsulas and tiny islands is a haven for nature and incredibly species-rich – home, for example, to such rare mammals as pine martens and red squirrels.

So much of the economic potential here depends on the security and purity of the water, and the complex ecosystems that keep it that way: not only power generation, transport, carbon capture and flood storage but boating, watersports, angling and eco-tourism too. Threats to biodiversity and the adverse effects of climate change could fatally undermine this potential. Nature needs our help not only to preserve these magnificent resources, but to extend and connect wildlife habitats around them, and for this to happen, wildlife needs must be factored into the way the surrounding land is managed.

RSPB Northern Ireland is already working in partnership with several other organisations on large-scale habitat restoration projects and sustainable land management at sites within the Futurescapes area, including Lough Beg, Sliabh Beagh, the Antrim Hills, Cuilcagh Mountain and Upper and Lower Lough Erne.

Government action now

The 2010 target to halt and reverse the decline in biodiversity was not met. Despite many successes, it is clear that our current tools and resources are not sufficient to adequately protect nature in the future.

The RSPB's Futurescapes programme sets out an ambitious vision, but a call to action by one organisation will not be enough on its own. To date, landscape-scale conservation has been constrained by a lack of funding and insufficient support among policy-makers. The new European biodiversity target for 2020 is just as ambitious, if not more so, than the one we have just failed to meet.

We need new tools if we are to rise to this challenge: new tools that turn landscape-scale conservation from a possibility to a probability; tools that recognise the huge contribution nature makes to the UK's well-being and provide in return an appropriate level of funding.

The RSPB calls for the following Government commitments to enable wildlife to flourish across the UK:

- ▶ Recognise the importance of the landscape-scale approach to nature conservation and take the intellectual lead in driving forward this approach, to build on and complement work on protected areas and targeted species conservation.
- ▶ Ensure appropriate policy and planning frameworks are in place to facilitate a landscape-scale approach.
- ▶ Introduce innovative mechanisms for funding a landscape-scale approach, make existing funding mechanisms work harder for wildlife and ensure that public spending does not have negative impacts on the natural resource base.
- ▶ Government agencies should undertake pilot projects to test the landscape-scale approach. Governments across the UK must, in partnership with others, learn the lessons from practice to inform future policy-making.



Working together

The RSPB has decades of experience of helping to put the natural world at the centre of decision-making. So often, we do this best when we work together – in co-operation with communities and in our many partnerships. We draw our strength and inspiration from the passion people have for the natural world.

"I live close to one of the world's best wildlife sites – the Ribble Estuary – and volunteering at the Ribble Discovery Centre, taking school children out mud dipping on the mud, finding the creatures that live there, means I really have experienced it first hand! It's vital local people get the chance to make a difference for their environment."
Andy Jane, volunteer

Our Futurescapes programme challenges us to build on our experience and apply, consistently, the lessons we have learned from our most successful and enduring projects. In recognising and embracing the challenge of true, empowering engagement, we believe that the natural environment will benefit and we will embark on a journey together that will have the power to change lives.

"This is a very important project that aims to stop the decline of this once-common and beautiful farmland bird, which is now struggling to survive. We hope that more farmers will use the Higher Level Stewardship Scheme – which is designed to work alongside commercial agriculture – to provide the land management that lapwings and other species need to breed and raise their broods successfully." *Roger Owen, Regional Director of Natural England, with reference to the Shropshire Wetlands Futurescapes initiative*

The landscapes that we have identified within our Futurescapes programme have been shaped by their histories and are at the heart of their communities. Our shared vision will only be achievable if we work together in co-operation and mutual respect.

We want to hear from you – so please contact us to discuss how we can work together to make our countryside rich in wildlife and better for people, now and in the future.

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Futurescapes is the **RSPB's vision** for landscape-scale conservation throughout the UK

Footnotes: 1 Natural England. Lost Life, 2010. 2 Donald et al. 2007. Science 317, 810. 3 Secretariat of the Convention on Biological Diversity. (December 2008). Draft findings of the ad hoc technical expert group on biodiversity and climate change. 4 Warming Met Office, 2009. 5 Warming Met Office, 2009. 6 RSPB, Wildlife Trusts, WWF, National Trust: Coast in Crisis. 2000. www.rspb.org.uk/Images/CRISIS72_tcm9-133013.pdf. 7 Foresight, Executive Summary, pp12–13. www.foresight.gov.uk/OurWork/ActiveProjects/LandUse/ufoutputs.asp (accessed 14 May 2010). 8 Donald, Paul. Climate change and habitat connectivity; assessing the need for landscape-scale adaptation for birds in the UK. RSPB, Sandy, 2005.

IMAGES: osprey by Danny Green, girl kicking leaves and Caledonian pine forest by David Tipling, RSPB Phoenix Group and barnacle geese by Kaleel Zibe, bittern and otter by Guy Rogers, water vole by Steve Knell, foxglove by Steve Austin, Dartford warbler by Andrew Mason, cranes and tractor and wild marjoram by Nick Upton, red kite by Andrew Parkinson, Norfolk habitat by Ernie Janes, redshanks by Laurie Campbell, woodland by Jeroen Stel and young bracken by Jodie Randall (all rspb-images.com); wildflower meadow by northlightimages, pine tree branch by letty17, sky by Turnervisual, pine bark by mb-fotos, leaves by bgfoto, sunrise reflection by JamesBrey, Lake Vyrnwy by JoeDanielPrice and sea water by webphotographer (all istockphoto.com); great yellow bumblebee by Bill Coster and Downing Street by DBURKE (both alamy.com); Loch Leven by Martin Srubar (dreamstime.com).

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