### **KENT NATURE PARTNERSHIP**

# **STATE OF NATURE** IN KENT 2021

An account of the changing fortunes of Kent's species and habitats, the pressures nature has faced and the conservation efforts undertaken over the last 10 years.



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Contributions Copy for this report was provided by experts from across the Kent conservation community. Authorship is acknowledged in the report citation

Citation:

Funding

Planning Officers Group.

and throughout the report.

Tinsley-Marshall, P., Skilbeck, A., Drake, C. Edwards, C., Allen, G., Atkinson, K., Baker, J., Ball, L., Bauer, K., Beale, S., Bleet, R., Bloor, R., Breeze, L., Britton-Williams, N., Buckingham, S., Butler, M., Clemons, L., Colver, E., Easterbrook, M., Fitzmaurice, A., Griffiths, A., Hadaway, P., Harding, R., Hazlehurst, G., Hayes, M., Heath, M., Hedley, S., Henderson, A., Hewitt, K., Hodges, R., Howard, R., Hunt, J., Hunter, I., Johnson, A., Kitchener, G., Mason-Baldwin, L., Moxey, T., Orchard, M., Parr, A., Pateman, B., Peckham, S., Phillips, M., Rainey, M., Reid, H., Russell-Smith, T., Ruyter, A., Shaw, I., Shenton, D., Simmons, H., Smith, H., Smith, S., Still, R., Swinnerton, K., Taylor, P., Thompson, S., Tittley, I., Tuson, D., Walker, D., Weeks, S., Witts, T., & Young, J. (2022) The State of Nature in Kent 2021. Kent Nature Partnership.

The production of this report was funded by Kent

Wildlife Trust, Kent County Council and Kent

#### **Alternative Formats**

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#### Ordnance survey data

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### FOREWORD

Following my move into agriculture, I came to understand the importance of Kent in feeding a growing population across the United Kingdom. In total, we provide two thirds of tree grown fruit and one third of all strawberries produced in the country. Food production is one of the many services and functions that nature provides us with, and I feel we need to look after Kent's wonderful biodiversity for its own sake, but also for our own survival and wellbeing.

The State of Nature in Kent 2021 is the story of both the successes and continued pressures and challenges for nature over the last 10 years. Partnership is at the heart of the successes and when action is joined up across landscapes, the outcomes have been dramatic.

We can rejoice in the good fortunes of two nationally scarce butterfly species, Heath Fritillary and Duke of Burgundy; marvel at the increasing populations of grazing marsh waders such as Lapwing and Redshank and be encouraged by the discovery of four and rediscovery of 14 native plant species, previously thought to have been lost. We should not forget, too, that many common species such as Chiffchaff, Blue Tit, many of our butterflies, orchids and mammals are thriving. The common, as well as the rare, should be celebrated, and all are essential in a resilient ecosystem.

For these successes to be expanded on, the value of nature needs to be understood and embedded in the work of organisations and sectors across Kent. We now need nature recovery on a grand scale and this cannot be delivered by the conservation sector alone. The signs are that things are changing and whether in the field of public health or planning and development there have been some positive stories of nature being used as part of the solution.

Kent has, however, seen some intense development over the last 10 years, creating pressures on our species and habitats. Added to this, we are in the middle of a global climate and ecological crisis, which is compounding these pressures and creating additional problems for Kent's nature.

On the positive side, this crisis has now been recognised from central government down to the local level and there is now a renewed drive towards nature recovery. Many of the people of Kent want to see this change too. There has been an increase in environmental volunteering and campaigning and the tragedy of the pandemic has created one positive in bringing people closer to wildlife on their doorstep or has highlighted to people the value of that nature connection when it is absent.

This renewed commitment to nature recovery is to be welcomed, but the challenges are immense and the approaches we have taken in the past will not be sufficient to halt future declines. This State of Nature in Kent report helps us to understand these challenges and highlights the need for ambitious collective action. It includes data on species, habitats and positive management, providing an important baseline for our future work.

The State of Nature in Kent 2021 highlights the work of hundreds of volunteers and professionals and although they can't all be named, I would like to personally praise all their hard work over the last 10 years and, in some cases, their direct contribution to the content of this report.

We must all continue to support and encourage each other in the uncertain times ahead and take on roles as nature enthusiasts, and advocates to continue to ensure that nature can flourish in Kent for generations to come. I also hope that the actions that flow from this report will see the county recognised as a champion for the natural world, so we can fully play our part in transforming biodiversity's fate and reversing its decline.

JB Gill



### **Biography**

Now an established member of the farming community in Kent, JB has used his success within the entertainment industry to highlight his passion to educate children about the origins of their food and he is the lead presenter on CBeebies' BAFTA-nominated television series, 'Down On The Farm' (created for children aged 0-6 years, teaching them about life on the farm and in the outdoors). JB's enthusiasm for farming life and knowledge of countryside issues has seen him regularly contribute to BBC's Countryfile and Springwatch programs.

### ACRONYMS

25YEP - 25 Year Environment Plan ADB - Ash Dieback AOD - Above Ordnance Datum AONB - Area of Outstanding Natural Beauty AOO - Area of Occupation **ARCH** - Assessing Regional Habitat Change BAME - Black, Asian and Minority Ethnic **BAP** - Biodiversity Action Plan BatCRU - Bat Conservation and Research Unit **BBCT** - Bumblebee Conservation Trust **BBS** - Breeding Bird Survey BC - Butterfly Conservation BCT - Bat Conservation Trust **BDS** - British Dragonfly Society BHPS - British Hedgehog Preservation Society **BNG** - Biodiversity Net Gain **BNG** - British National Grid **BOA** - Biodiversity Opportunity Areas **BPS** - Basic Payment Scheme BSBI - Botanical Society of Britain & Ireland **BTO** - British Trust for Ornithology CaBa - Catchment Based Approach **CEFAS** - Centre for Environment, Fisheries and Aquaculture **CMSi** - Conservation Management Sites International **CP** - Countryside Partnership **CPD** - Continued Professional Development **CPRE** - Campaign to Protect Rural England **CR** - Critically Endangered **CSF** - Catchment Sensitive Farming **DDT** - Dichlorodiphenyltrichloroethane DEFRA - Department for Environment, Food and **Rural Affairs DLL** - District Level Licensing **DWPA** - Diffuse Water Pollution from Agriculture **EA** - Environment Agency **EIA** - Environmental Impact Assessment **ELMS** - Environmental Land Management Scheme

EN - Endangered

FBNA - Fellow of the British Naturalists' Association FC - Forestry Commission FCS - Favourable Conservation Status FOCI - Feature of Conservation Importance **GIS** - Geographic Information System **GSP** - Green Social Prescribing **GMA** - General Management Approach **GP** - General Practitioner HAP - Habitat Action Plan HCLG - Housing, Communities and Local Government HIA - Health Impact Assessment HLMO - High Level Marine Objective HLF - Heritage Lottery Fund HLS - Higher Level Stewardship IDB - Internal drainage board **IEEP** - Institute for European Environmental Policy IEMA - Institute of Environmental Management and Assessment IFCA - Inshore Fisheries and Conservation Authorities **INNS** - Invasive Non-Native Species IPCC - Intergovernmental Panel on Climate Change **IUCN** - International Union for Conservation of Nature JNCC - Joint Nature Conservation Committee KBG - Kent Bat Group KBRG - Kent Botanical Recording Group KCC - Kent County Council KCLT - Kent Conservation Landscape Tool KEIFCA - Kent and Essex Inland Fisheries and **Conservation Authority** KFC - Kent Field Club KMBRC - Kent and Medway Biological Record Centre KMG - Kent Mammal Group KMoG - Kent Moth Group **KNP** - Kent Nature Partnership KOS - Kent Ornithological Society KRAG - Kent Reptile and Amphibian Group KWCA - Kent Wildfowling and Conservation Association **KWT** - Kent Wildlife Trust



NTZ - No Take Zone

**NVC** - National Vegetation Classification

NWVMP - National Water Vole Monitoring Programme

OCND - Old Chalk New Downs

**OPM** - Oak Processionary Moth

**OSPAR** - Oslo and Paris Convention (for the Protection of the Marine Environment of the North-East Atlantic)

**PBDE** - Polybrominated Diphenyl Ethers

PCBs - Polychlorinated Biphenyls

PES - Payment for Ecosystem Services

PFOS - Perfluorooctane Sulphonic Acid

PHI - Priority Habitat Inventory

PM - Particulate Matter

**PROW** - Public Right of Way

PTES - People's Trust for Endangered Species

RIMP - Regional Invasive Alien Species Management Plan

**RPR** - Rare Plant Register

**RSPB** - Royal Society for the Protection of Birds

RTPI - Royal Town Planning Institute

SAC - Special Areas of Conservation

SAMMS - Strategic Access Management and Monitoring Scheme

SDL - Single Data List

SEA - Strategic Environmental Assessment

SELEP - South East Local Enterprise Partnership

SENP - South East Nature Partnership

SFD - Snake Fungal Disease

SFI - Sustainable Farming Incentive

SHcAB - Shared Health and Care Analytics Board

SMT - Shoreline Management Plan

SOD - Sudden Oak Death

SPA - Special Protection Area

SRS - Spider Recording Scheme

SSSI - Site of Special Scientific Interest

541 - Schedule 41

TDFZs - Turtle Dove Friendly Zones

UKCEH - UK Centre for Ecology and Hydrology

VAM - Views about Management

VCSE - Voluntary, Community and Social Enterprise

VU - Vulnerable

WFD - Water Framework Directive

WSF - Wild Spaces Fund

# INTRODUCTION

### **BACKGROUND AND RATIONALE** CHRIS DRAKE, KENT COUNTY COUNCIL, & PAUL TINSLEY MARSHALL, KENT WILDLIFE TRUST

This State of Nature in Kent 2021 report is an account of the changing fortunes of our species and habitats over the last 10 years, the pressures nature has faced during this time, and the efforts that have been put in place to look after our natural environment. It is published at a time when the climate and ecological crisis is recognised across the globe and landmark legislation is being brought in across the UK with ambitious objectives for nature's recovery. The report looks back at the successes for nature in Kent, but recognises that previous approaches have not been sufficient to reverse an overall decline in our biodiversity. It is also a call to arms for innovative solutions and collective action to change this position.

For the purposes of the report, 'Kent' refers to the geography of the whole county, including the political boundaries of both Kent and Medway. Kent is one of the UK's most wildlife-rich counties as a result of its extensive coastline, landscape history, southerly location, and proximity to mainland Europe. The county encompasses globally rare habitats, such as vegetated shingle, marine chalk reef, chalk grassland and chalk steams. Despite increasing development, it is still largely an agricultural county and has extensive woodland coverage compared to other parts of England.

This wealth of varied habitat supports more than 3,400 rare and threatened species, with some of these nationally rare and some only found in Kent within the UK. But it is not just the rare or endangered that matter; even the most commonplace species are vital within the wider natural environment, and bioabundance – as well as biodiversity – is under threat. We are fortunate to live in such a county, but also have a responsibility to hand nature over to future generations.

The importance of nature, and the essential role it plays in our lives, has become increasingly recognised. It provides a plethora of services vital to our existence - the air we breathe, the water we drink, and the food we eat. It provides us with raw materials, and a place for leisure, recreation and reflection. Consideration of this 'natural capital' and the natural solutions our habitats and species can provide, will be crucial to nature recovery in Kent.

Kent is a county that needs to meet the needs of a growing population and is the home for a range of industries. In the face of these pressures, it will not

Natural capital is increasingly recognised in commercial decision making and is at the heart of the government's 25-year Environment Plan. This plan has started moving forward, and mechanisms such as mandatory Biodiversity Net Gain for new developments will help to deliver an ambitious Nature Recovery Network, as enshrined in the new Environment Act.

State of Nature reports for the UK have been released in 2013, 2016 and 2019. These reports used the best available data to assess the status of species and habitats. These national findings provide an indication about the state of nature at a national scale, but cannot consider local variations in the distribution. abundance or status of species and habitats. The last report on the state of nature in Kent was The State of Kent's Wildlife, published in 2011.

always be possible to preserve natural environment; rather, we need to find new ways of reversing losses in biodiversity. Alongside traditional conservation management, natural capital and natural solutions will need to be put at the centre of commerce and housing development. This type of thinking and policy is now starting to take hold.

Across national and local government, and a range of other organisations, plans have also been put in place to address the global climate emergency. All Kent authorities have declared one, and some have also declared an ecological emergency. These plans propose natural solutions to a number of issues, ranging from flooding to air quality, and fundamentally highlight how nature can be used to not only solve some of society's problems, but also how these process can help nature itself recover.

We cannot, however, look to policy and plans alone as the solution to nature recovery; we need a concerted collaborative effort across society to see the vision realised on the ground. We are at a crossroads, and efforts such as the Environment Act represent a oncein-a-generation opportunity, which must be seized.

Inspired by the national State of Nature reports, and county reports from around the UK, this report updates the 2011 publication, with input and perspectives from organisations working for the natural environment in Kent, brought together under the umbrella of the KNP.

Background and rationale | Action for nature in Kent | Kent overview | Designated sites

#### This report aims to:

- Provide a reporting mechanism for the KNP Kent Biodiversity Strategy 2020-2045.
- Build on the existing evidence base by drawing together information on the area of land managed positively for wildlife, and the status of species.
- Provide a mechanism for demonstrating collective action for nature, within the Kent Nature Partnership and beyond.
- Deliver a stronger evidence base that will provide an enhanced mechanism for representing the environment in decision making and risk management.
- Provide an evidence-base for underpinning our Local Nature Recovery Strategy.
- Strengthen the basis for advocacy and funding. Look to better align with regional reporting, such as
- the national State of Nature report. Provide an ongoing monitoring framework that provides better evidence of trends.
- Showcase key species and habitats within the county, highlight conservation success stories, and set Kent in context with the rest of the UK.

This State of Nature in Kent report provides a mechanism for keeping data on species, habitats and management up-to-date, and provides an instructive

basis for future environmental decision making and risk management in Kent. It should be used as a catalyst for future action, accompanying the Kent Biodiversity Strategy, which provides the template for that action.

This report provides examples of a number of pressures that nature in Kent is currently facing from Kent's coastal habitats - which are vulnerable to the impacts of increased rainfall, sea level rise and changes in erosion rates caused by climate change; to the pressures on much of Kent's extensive woodland, which is not in good condition and exceeds critical levels of nitrogen – a problem which is causing the deterioration of a range of ecosystems.

This report was compiled by KWT under the guidance of a KNP steering group, and was funded by KWT, KCC and Kent Planning Officers Group. This report has been supported by a wealth of local organisations and experts who provided data and written content. It represents a huge body of evidence on species, habitats and positive management, along with the pressures faced over the last 10 years. We hope that this account provides an important baseline for all our future efforts to reverse worrying declines in Kent's nature.



# **ACTION FOR NATURE IN KENT**

The KNP is a coordinating strategic body, standing up for nature in the county. The KNP has a vision for a "restored, healthy natural environment that functions as a coherent and resilient ecological network, thriving with wildlife and plants. This will inspire engagement, underpin human health and our economy, as well as providing solutions to the challenges facing Kent and Medway."

The KNP was awarded LNP status by the Government in July 2012 to drive positive change in the local natural environment. The partnership takes a strategic view of the challenges and opportunities involved in managing the natural environment as a system benefiting biodiversity, people and the local economy. Its mission is to enable a diverse range of organisations to work in partnership and to make the best use of the available resources in order to achieve significant gains for Kent's biodiversity.

KNP encompasses a wide range of organisations from the public, private and voluntary sector, all

The partnership is led by an executive level board, and the work of the board is supported by the Management Working Group (MWG). The MWG provides technical and sectoral advice required to realise the strategic vision of the KNP and act as sector representatives, gaining input to the partnership's work from all relevant partners in the county. The MWG delivers a programme of work agreed by the KNP Board. KNP also has a range of sub groups working on priority areas. This report aims to inform on the outcomes of collective action for nature in Kent.



of which are working towards nature recovery in the county. KNP is working towards a more joined up and collaborative approach to meeting the challenges outlined in this State of Nature report. At a time of ecological crisis, KNP aims to help steer the collaborative work of conservationists, government, business and individuals to work in partnership to restore nature and see a recovery in species and habitats.

## **AN OVERVIEW OF KENT**

Kent is one the UK's most wildlife-rich counties, a result of its varied geology, long coastline, landscape history, southerly location and proximity to mainland Europe. Its important wildlife habitats include estuaries, chalk cliffs, woodlands and chalk downland, and it encompasses some of the South East's most iconic landscapes, such as the shingle headland of Dungeness and the White Cliffs of Dover. The following section provides an overview of the landscape, character and habitats that underpin the natural value of the county, and sets the context for the conservation action detailed in this report.

### **Kent in Context: Landscape** and **Topography**

Sourced from Kent Geologists' Group Kent's landscape and the topography are influenced by its geology. Surface rock dates from the Cretaceous and Tertiary ages (140 to 50 million years ago) and consists of a thick sequence of sands, clays and limestones gently folded into an anticline known as the Weald Dome. Erosion has removed the highest parts of the dome, with the oldest sandstones of the High Weald exposed in its centre, while younger chalks of the North and South Downs form its outer rim.

Freshwater sandstones and clays of the Wealden Series were deposited in a subsiding basin to the south of an old landmass known as the London Platform, which is now buried under North Kent and London. Shallow gravelly rivers flowing from these uplands carried sediment into an extensive area of low lying marshes with ponds, streams and sand banks.



Background and rationale | Action for nature in Kent | Kent overview | Designated sites

Uplands were lowered by erosion, and only fine sediment was generated and the basin became a mud plain. Because the London Platform was repeatedly uplifted and eroded, three sandstone/clay cycles can be recognised. The first is an extensive mud plain, which developed as the uplift cycles waned; this is preserved as the Weald Clay. Because sandstones predominate in the first and second cycle, their resistance to weathering then creates the rolling, wooded High Weald. Finally, the softer, overlying Weald Clay forms the low-lying Low Weald.

Introduction

The rocks of the Greensand Ridge mark a dramatic change in marine conditions; this is because of a shallow seaway, which was established between the North Sea and the southern Tethyan Ocean around the western end of the London Platform. Initially, clays were deposited here; however, gradually sands and sandy limestones came to predominate. Today, these limestones, known as Kentish ragstone, produce fertile soils, whereas the sands give rise to poor acid soils, now characterised by woodland and heath.

#### From the Greensands down into the Vale of Holmesdale, the soils become heavy and clavey. This Gault Clay marks a widening of the old seaway as sea levels began to rise dramatically. Eventually, so much land was submerged that no sediment from land



(sand/clay) could reach the Kentish area. Only the skeletons of tiny organisms, overwhelmingly those of calcareous algae, were deposited, forming Kent's most characteristic landscape features, the North Downs and the White Cliffs of Dover.

Around 65 million years ago, sea levels fell and southeast England was uplifted. This led to widespread erosion of the chalk and the non-deposition of the earliest Tertiary rocks; the junction of which can be seen at the corner of Pegwell Bay on the Isle of Thanet. Younger Tertiary sands and clays are preserved on this surface all along the North Kent coast. They are marine and estuarine sediments deposited along the edge of the North Sea about 55-50 million years ago. Their story ends with a thick blanket of London Clay, internationally famous for its plant fossils, which can be seen in the land slipped cliffs of Sheppey.

Lastly, thin yellow sands, known as the Lenham Sands, are found high up on the Downs, east of the Medway gap.

Background and rationale | Action for nature in Kent | Kent overview | Designated sites

#### Kent's National Character Areas

#### Sourced from Natural England

Heavily influenced by geology, Kent's NCAs provide the context in which its habitats and species are embedded. Here we briefly describe these areas.



Kent's National Character areas

#### **Greater Thames Estuary**

The Greater Thames Estuary NCA is predominantly a remote and tranquil landscape of shallow creeks, drowned estuaries, low lying islands, mudflats and broad tracts of tidal salt marsh, and reclaimed grazing marsh that lies between the North Sea and the rising ground inland. It forms the eastern edge of the London Basin and encompasses the coastlines of South Essex and North Kent, along with a narrow strip of land following the path of the Thames into East London. Despite its close proximity to London, the NCA contains some of the least settled areas of the English coast, with few major settlements and medieval patterns of small villages and hamlets on higher ground and the marsh edges. This provides a stark contrast to the busy urban and industrial areas towards London, where population density is high and development pressures are increasing. Sea defences protect large areas of reclaimed grazing marsh and its associated ancient fleet and ditch systems and productive arable farmland. Historic military landmarks are characteristic features of the coastal landscape.

#### North Kent Plain

The North Kent Plain NCA is the strip of land between the Thames Estuary to the north and the chalk of the Kent Downs to the south. The area is open, low and gently undulating. It is a very productive agricultural area with predominantly high-quality, fertile loam soils characterised by arable use. Traditional orchards, soft fruits and other horticultural crops exist in central and eastern areas, giving rise to the use of the title 'Garden of England'. There is an extensive area of ancient woodland around Blean, plus significant ancient woodlands further west; however, it is generally an open landscape. Characteristic shelterbelts occur within the fruit-growing areas, but the agricultural land is mostly devoid of hedgerows.

#### North Downs

The North Downs NCA forms a chain of chalk hills extending from the Hog's Back in Surrey and ending dramatically at the internationally renowned White Cliffs of Dover. The settlement pattern is characterised by traditional small, nucleated villages, scattered



farms and large houses with timber framing, flint walls and Wealden brick detailing. Twisting sunken lanes, often aligned along ancient drove roads, cut across the scarp and are a feature of much of the dip slope. The Kent Downs and Surrey Hills AONB designations are testament to the qualities and natural beauty of the area.

#### Wealden Greensand

The long, curved belt of the Wealden Greensand runs across Kent parallel to the North Downs, and on through Surrey. It moves south, alongside the Hampshire Downs, before curving back eastwards to run parallel with the South Downs in West Sussex. Around a guarter of the NCA is made up of extensive belts of woodland – both ancient mixed woods, and more recent conifer plantations. In contrast, the area also features more open areas of heath on acidic soils, river valleys and mixed farming, including areas of fruit growing. The area has outstanding landscape, geological, historical and biodiversity interest. Some 51% of the NCA is covered by the South Downs National Park, Kent Downs AONB and Surrey Hills AONB - a testament to the area's natural beauty. The underlying geology has shaped the scarp-and-dip slope topography, with its far-reaching views, but it has also had a significant bearing on the area's sense of place: there are clear links between vernacular architecture, industry and local geology. The heritage assets provide vital connections to the NCA's industrial, military and cultural history, and include distinctive deer parks and more recent 18th century parklands. Biodiversity interests are represented by internationally and nationally designated sites, alongside numerous local sites and other nondesignated semi-natural habitats. The internationally designated sites include three SPAs, two Ramsar sites, and eight SACs, representing the outstanding value and quality of the heathland, woodland, wetland and coastal habitats found within the NCA. In addition, fragments of acid grassland and parkland landscapes add to the overall diversity of habitats.

#### Low Weald

The Low Weald NCA is a broad, low-lying, clay vale which largely wraps around the northern, western and southern edges of the High Weald. It is predominantly agricultural, supporting mainly pastoral farming owing to heavy clay soils, with horticulture and some arable on lighter soils in the east; it also has many densely wooded areas with a high proportion of ancient woodland. Around 9% of it falls within the adjacent designated landscapes of the Surrey Hills, Kent Downs and High Weald AONB and the South Downs National Park. Around 23% of the area is identified as greenbelt land.

The High Weald NCA encompasses the ridged and faulted sandstone core of the Kent and Sussex Weald. It is an area of ancient countryside and one of the best surviving medieval landscapes in northern Europe. The High Weald AONB covers 78% of the NCA. The High Weald consists of a mixture of fields, small woodlands and farmsteads connected by historic routeways, tracks and paths. Wildflower meadows are now rare, and prominent medieval patterns of small pasture fields enclosed by thick hedgerows and shaws (narrow woodlands) remain fundamental to the character of the landscape.

#### **Romney Marshes**

The Romney Marshes is an open landscape of reclaimed, low-lying marshland. The area is bounded to the south and east by the English Channel, and to the north and west by the clearly recognisable ancient cliffline, which now forms the backdrop to the marshes. It includes the vast sand and shingle beaches and flat marshland between Hythe in Kent and Pett in Sussex. This unique, and sometimes forbidding, area has a character all of its own and contains a wealth of wildlife and geomorphological features. Dungeness, for example, is an area of international importance for its geomorphology, plants, invertebrates and birds. Home to some of the UK's rarest species, it is designated as a National Nature Reserve, SAC, SPA and SSSI, as well as being a proposed Ramsar site. Dungeness and Rye Harbour comprise the largest cuspate shingle foreland in Europe - one of the few such large examples in the world. Scattered settlements are linked by long, straight, open roads and have a distinctive architectural character, including weatherboarding and hung tiles; many have medieval churches at their core. The ancient towns of Rye and Winchelsea are popular tourist attractions, abound with heritage features. Overall, however, urban areas account for a small proportion of this rural NCA. The transport links are sparse, and this, coupled with the nature of the landscape, rural isolation and lack of employment, means that the area suffers from issues of social and economic deprivation.

#### High Weald

#### **Kent Biodiversity Strategy Priority Habitats and Species**

Introduction

Kent's habitats and species are strongly linked to the landscape, geological and character features described in the previous section. Over the last few decades, we have lost significant areas of many of our most precious habitats and many species. We now need to restore those degraded habitats, replenish our depleted soils, and arrest the decline of native species to deliver robust ecological networks that are sustainable, ecologically coherent and resilient to climate change. The Kent Biodiversity Strategy sets a goal that, by 2045, Kent will have a rich and growing terrestrial biodiversity, underpinned by more resilient and coherent ecological networks and healthy, wellfunctioning ecosystems.

This report provides a mechanism to assess progress against goals for ecosystems, habitats and species. It draws out the current status of priority habitats and species in Kent; however, it is recognised that although there is a need to update the 2011 report with the best available evidence, it will take time to develop a comprehensive mechanism to review progress towards the goals of the Kent Biodiversity Strategy.



 Headlines
 Drivers
 Conservation
 Kent's Species
 Landscape-scale
 Case Studies
 Conclusion

### **Objectives of the Kent Biodiversity Strategy 2045**

The following tables detail the objectives, priority habitats, and priority species as outlined by the Kent Biodiversity Strategy 2045.

#### Table 1 Terrestrial ecosystems, habitats and species.

The aim is that by 2045, Kent will have a rich and growing terrestrial biodiversity, underpinned by more resilient and coherent ecological networks, and healthy, well-functioning ecosystems.

Objectives	Priority habitats	Priority species
<ul> <li>20.84% of high value semi-natural habitat (74,750 ha) well managed for nature.</li> </ul>	Lowland Beech and Yew woodland	<ul> <li>Shrill Carder Bumblebee</li> <li>Turtle Dove</li> </ul>
<ul> <li>An ecological network of semi-natural nabitat (nigh and low value) covering 30% of Kent (112,000 ha).</li> </ul>	<ul> <li>Lowland mixed broadleaved woodland</li> </ul>	Swift
<ul> <li>75% Sites of Special Scientific Interest restored to favourable condition, securing their wildlife value for the long term.</li> </ul>	<ul><li>Chalk grassland</li><li>Lowland meadow</li></ul>	<ul><li>Adder</li><li>Adonis Blue</li></ul>
<ul> <li>Over half of Local Wildlife Sites in good management, securing their local wildlife value for the long term.</li> </ul>	<ul><li>Lowland dry acid grassland</li><li>Lowland heathland</li></ul>	<ul><li>Heath Fritillary</li><li>Dwarf/Kentish Milkwort</li></ul>
<ul> <li>More, bigger, and less fragmented areas of wildlife-rich habitat outside the protected sites network for wildlife, with an increase in the overall extent of all priority habitats to ensure greater connectivity and resilience to climate change.</li> </ul>	<ul><li>Hedgerows</li><li>Brownfield</li><li>Traditional orchard</li></ul>	
<ul> <li>New development to better provide for a greener urban environment, through increased urban tree planting, the inclusion of integral wildlife niches, and green building and landscape design.</li> </ul>		
<ul> <li>Protect and restore existing trees, hedgerow and woodland, while increasing the county's tree cover with the right trees in the right places to support the recovery of wildlife, deliver natural climate solutions, and enrich people's lives.</li> </ul>		

 Kent-specific threatened and iconic species of terrestrial animals and plants are recovering, including those that support ecosystem services.

Introduction	Headlines	Drivers	Conservation
Background and rat	ionale   Action for nature	in Kent   <b>Kent overvi</b> e	ew   Designated sites

Table 2 Freshwater and intertidal ecosystems, habitats and species. The aim is that by 2045, Kent will have clean, plentiful and biologically diverse freshwater and intertidal ecosystems, underpinned by the implementation of a catchment-based approach.

Objectives	Priority habitats	Priority species
<ul> <li>75% freshwater SSSIs restored to favourable condition, securing their wildlife value for the long term.</li> <li>Over half of Local Wildlife Sites in good management, securing their local wildlife value for the long term.</li> <li>Reaching or exceeding objectives for rivers, lakes, coastal, and ground waters that are specially protected, whether for biodiversity or drinking water.</li> <li>No deterioration in the status of any water body in Kent. If deterioration of any element's classified status occurs, actions will be implemented to reverse the decline.</li> <li>Improve 375 km (15 km per year) of waters in Kent (rivers, lakes, canals, groundwater, transitional and coastal waters). The enhancements include work to improve ecological, chemical and/ or physical guality, e.g. reducing pollution, restoring flows and</li> </ul>	<ul> <li>Rivers</li> <li>Chalk streams</li> <li>Ponds</li> <li>Coastal and floodplain grazing marsh</li> <li>Intertidal mudflats and coastal saltmarsh</li> <li>Wet woodland</li> <li>Vegetated shingle</li> </ul>	<ul> <li>European eel</li> <li>Lapwing</li> <li>Sandwich tern</li> <li>Water vole</li> <li>True fox-sedge</li> </ul>

Table 3 Marine ecosystems, habitats and species. The aim is that, by 2045, Kent will be making its contribution to reversing the loss of marine biodiversity and delivering clean, productive and biologically diverse oceans and seas through good management.

#### Objectives

improving habitat.

- · A series of Marine Protected Areas off the coast of Kent, forming an ecological network that is effective in conserving marine habitats.
- There will be no further decline of Kent's Marine Protected Areas, which will b signs of recovery as a result of regular monitoring and well-informed manage damaging activities.
- Kent's Marine Protected Areas will be improved and extended, so that represe missing from the network are featured and offered protection as required.
- Pressures will be assessed, and appropriate management identified and imple entirety of Kent's Marine Protected Areas, to adequately protect the features f areas were designated (it is the intention that this objective will be achieved w timeframe of 2025).
- · The South East and South Marine Plans are being applied and have been inte relevant local plans.
- We will be managing shellfish stocks sustainably and harvesting shellfish in a environmentally damaging way.
- · There is better understanding of the subtidal and tidal environment and ephe features, with the development of spatial management plans and strategic ad areas under more pressure.
- The natural capital value of the marine environment as a carbon sink is better being managed to realise this contribution.

Note: Due to the innate difficulty of undertaking meaningful monitoring of marine species at a county level, no targets are set for marine species in the KBS; however, Harbour and Grey Seals have been included as an indicator species for the health of the estuarine environment

	Priority habitats
lly coherent	<ul> <li>Intertidal chalk and subtidal chalk</li> </ul>
e showing ement that limits	Subtidal mud
entative habitats	
emented for the for which those within the shorter	
grated within	
non-	
emeral marine ction for those	
understood and	



# **KENT'S DESIGNATED SITES**

Wildlife sites and landscape areas can be 'designated', which means they have special status as protected areas because of their natural and cultural importance. Kent contains a variety of these designated areas. Sites that are important for nature conservation can be designated at different levels, the highest of which are of national or European significance. However, designated areas can overlap. Being 'designated' means that these places have clear boundaries, and in most cases, laws and/or policies designed to ensure that the habitat and wildlife are not harmed or destroyed. Sites can also be designated by organisations such as Natural England and local councils. There are restrictions on activities and developments that might affect a designated or protected area, for example, building new houses or roads. The level of restriction depends on the level of designation, and can include areas next to, as well as in, those areas. In total, 16% (62,671 ha) of Kent (390,808 ha) is covered by one or more designations, with 6.5% (25,580 ha) having European or international level protection, 8.9% (34,946 ha) with national protection, and 7.1% (27,776 ha) with local site designation. See Figures Xa and Xb for maps of designated sites in Kent.

### Kent's Statutory Protected Sites

If a site of nature conservation importance has 'Statutory Protection', it means that it receives protection by means of certain legislation in recognition of its biodiversity and/or geological value.

#### Sites of Special Scientific Interest (SSSIs)

Kent has 98 SSSIs: 21 designated for their geological interest, 67 for their biological interest, and 10 for both reasons. SSSIs support habitats and/or species of national importance and are designated under the Wildlife & Countryside Act 1981. SSSIs represent the best sites for wildlife and geology. More than half by area are internationally important, and many play an important part in local culture and economies or provide opportunities for people to enjoy wildlife and landscape. The wildlife and geological features of SSSIs are irreplaceable parts of our national heritage. These are protected in order to preserve their importance, and to prevent damage and development.

#### Special Areas of Conservation (SACs)

Kent has 14 SACs; these sites are designated because they support internationally important habitats and/or species listed in the EC Habitats Directive.

#### **Ramsar Sites**

Kent has 11 NNRs; these are sites designated under section 35 of the Wildlife & Countryside Act 1981. They are owned by or managed through agreements with Natural England.

#### Local Nature Reserves (LNRs)

Kent has 42 LNRs. All district and county councils have powers to acquire, declare and manage LNRs. Town and parish councils can create LNRs if the district council has given them the power to do this. To qualify for LNR status, a site must be of importance for wildlife, geology, education or public enjoyment. LNRs must be controlled by the local authority through ownership, lease, or agreement with the owner.

### **Kent's Non-Statutory Sites**

In Kent, there are more than 460 Local Wildlife Sites, covering a total area of more than 27,500 ha, roughly 7% of the county. Local Wildlife Sites are sites with 'substantive nature conservation value'. They are defined areas, identified and selected for their nature conservation value, based on important, distinctive and threatened habitats and species with national or regional significance. Found on both public and private land, LWS vary in size and shape, from small ponds, copses and linear features, such as hedgerows, road verges and water courses, to much larger areas of habitat, such as ancient woodlands, heaths, wetlands and grassland. They support both locally and nationally threatened wildlife, and many sites contain habitats and species that are priorities at both county and national scales.

#### Special Protection Areas (SPAs)

Kent has six SPAs; these areas have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. These sites are designated under the European 'Birds Directive 1979'.

Kent has six Ramsar sites. The Ramsar Convention is an international agreement signed in Ramsar, Iran, in 1971, and provides for the conservation and good use of wetlands. The UK Government ratified the Convention and designated the first Ramsar sites in 1976.

#### National Nature Reserves (NNRs)

#### Local Wildlife Sites (LWS)



Background and rationale | Action for nature in Kent | Kent overview | Designated sites

#### Roadside Nature Reserves (RNRs)

The Kent and Medway Road Verge Project, established in 1994, works to identify, protect and manage road verges which contain threatened habitats or wildlife. The Project is a partnership between Kent County Council Highways and KWT. It has a Road Verge Project Officer, based with KWT, who works with a dedicated

team of Voluntary Road Verge Wardens to maintain the condition of the verges and monitor their wildlife interest. Kent's RNRs have a combined length of 8.5km of approximately 48 ha in area. The majority of RNRs are chalk grassland, but other habitats include ancient woodland, acid and neutral grassland.



Figure 1a Designated sites in Kent: A) Sites of Special Scientific Interest; B) National Nature Reserves; C) Local Nature Reserves; D) Special Areas of Conservation; E) Special Protection Areas.





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Figure 1b Designated sites in Kent: F) Local Wildlife Sites; G) Roadside Nature Reserves; H) Ramsar.

#### References

Kent Geologists' Group (2020) A Synopsis of Kent's Geology. [online] Available at: http://www.kgg.org.uk/ kentgeo.html Accessed June 2021.

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