



# State of the Natural Environment 2008

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Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

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# Foreword

Our understanding of our natural environment and how it underpins our wellbeing and prosperity is growing all of the time. However our natural world is both magnificent and complex and there is a great deal that we still do not know or fully understand about it.

Natural England was established in October 2006 as an independent expert body to advise on the natural environment. We are committed to ensuring that our advice is based on the best available evidence and knowledge.

This *State of the Natural Environment 2008* Report, brings together for the first time the evidence we have about the current state of our natural environment. By integrating this evidence and presenting it in this way we are able to ensure that both Natural England and other organisations have evidence at their fingertips, that can inform policies, priorities and decisions which may affect the natural environment.

The Report covers the natural environment, by which we mean our landscapes, flora and fauna, freshwater and marine environments, geology and soils. The Report therefore complements reports of other organisations such as the Environment Agency covering other environmental issues such as water and air quality.

In compiling the Report over the past 12 months we have not commissioned new evidence to fill gaps in our knowledge. Rather, we have presented and analysed existing data in new ways which we hope will be informative and useful. In putting this Report together we have, however, been able to see the gaps in our knowledge more clearly, which will help both Natural England and others to shape priorities for future research.

The Report has been compiled by a team of Natural England's specialist staff with input from a wide range of stakeholders. A number of specialist organisations maintain excellent data on particular aspects of the natural environment and we are particularly grateful to these organisations for their input and contributions.

The Report demonstrates that the natural environment in England is much less rich than 50 years ago and remains under pressure from a significant range of threats. It illustrates the impact of those threats on our landscapes and biodiversity.

Although we are broadly maintaining the character of England's landscapes, with only 20% showing signs of neglect, nevertheless within our landscapes there are significant problems. For instance, lack of woodland management is causing a 50% decline of our native woodland butterflies – the wood is still there but the butterflies aren't.

Other habitats are also deteriorating – only 3% of our grasslands remain rich in native plants, and declines in wetland quality have led to losses such as the virtual extinction (90% decline) of breeding snipe from lowland England outside nature reserves. We are seeing signs of stress from climate change, both on the coast, where habitats are being squeezed between our sea walls and the rising sea (25% saltmarsh loss from the south east of England), and on land, with a range of species moving northwards and upwards.

However, where we target action we can make a difference. The long-term decline in many of our farmland birds is slowing thanks to more environmentally friendly farming. The overall condition of our most important wildlife sites (Sites of Special Scientific Interest) has improved dramatically in the last 10 years. Species such as the red kite are recolonising their former range after successful reintroductions, and heathland birds such as nightjars and woodlarks are increasing thanks to better management of our heathland.

Finally, there are more opportunities for people to enjoy the natural environment, and there is growing evidence of the benefits for people from increasing access to and engagement with the natural environment.

This report provides a baseline against which future progress can be measured and importantly draws attention to areas that are in urgent need of action.

Thank you to all of the contributors to the Report and we look forward to your feedback and suggestions for the next edition.



Sir Martin Doughty  
Chair

Dr Helen Phillips  
Chief Executive



# 1 Introduction

# 1 Introduction

## Purpose of the Report

This Report is the first in-depth compilation of the evidence on the state of, threats to, and actions taken to secure England's natural environment. It brings together the available evidence base in order to inform the integrated delivery of measures to secure our natural environment both now and for the future.

The purposes of the Report are therefore:

- 1) to describe the current state of the natural environment, as a baseline for comparisons in the future;
- 2) to make this information widely available; and
- 3) to inform policy, decision makers and future research priorities.

## Report structure

In addition to this introduction the Report is divided into three main parts, covering:

- The values of the natural environment
- The pressures and risks to these values
- The responses that are currently being used to conserve and enhance the natural environment.

Throughout the Report, case studies highlight the economic benefits of the natural environment in relation to the range of ecosystem services such as clean water, food and flood defence that it provides.

A short conclusion draws together the key issues and points to some of the key challenges for the future.

## Values of the natural environment

Three chapters of the Report describe why the natural environment is valuable and what aspects we value most. Chapter 2 looks at the value of our landscapes and geodiversity, and Chapter 3 at the importance of our biodiversity, whereas Chapter 4 looks at how people value the natural environment for recreation, enjoyment and inspiration.

## Pressures and risks to the natural environment

Chapter 5 describes the current pressures on the natural environment as well as the potential risks in the future. Individual sections look at climate change, the impact of invasive species and diseases, land use and management practices and pollution.

## Responses to conserve and enhance the natural environment

Chapter 6 assesses the actions that have been taken in response to the threats to the natural environment and how effective these have been. We describe a range of examples where action has been taken to conserve, enhance and manage the natural environment. We look at strategies to conserve special sites and species as well as the wider countryside. We also provide examples of responses in our freshwater, coastal and marine environments as well as the use of spatial planning.

## The evidence

The Report is evidence-based. We have sought to use and provide reference to the primary sources of data which provide the essential information on the state of, and trends in, our natural environment. Where the data are from Natural England we have made this clear on the graphics (Source: Natural England 2008).

In the Report particular emphasis has been placed on presenting evidence in geographical form wherever possible and providing a regional breakdown of data. This is in recognition of the importance of understanding regional and local variations in the state of the natural environment. Throughout the Report we have used maps as a basis for integrating evidence for different aspects of the environment.

Although the Report presents a considerable amount of evidence on our natural environment, it has also identified significant gaps in the evidence available. The key gaps are identified at the end of each chapter.

In producing this Report a more detailed set of resource documents has also been produced, containing more information than could be included in this Report. These are available on the Natural England website.

To assist the reader we provide a Quick Find and a Glossary of Terms for the key topics.