ENGLISH NATURE

SUMMARY

State of nature

Lowlands - future landscapes for wildlife

working today
for nature tomorrow

Executive summary

Extensive, high quality habitats and landscapes rich in wildlife are now scarce in lowland England. Much wildlife found in the lowlands occurs in fragmented areas of semi-natural habitat, which are subject to a combination of pressures, including diffuse pollution, climate change and inappropriate management. The opportunity now exists to enhance the wildlife of lowland England through reconnecting habitats and improving their quality.

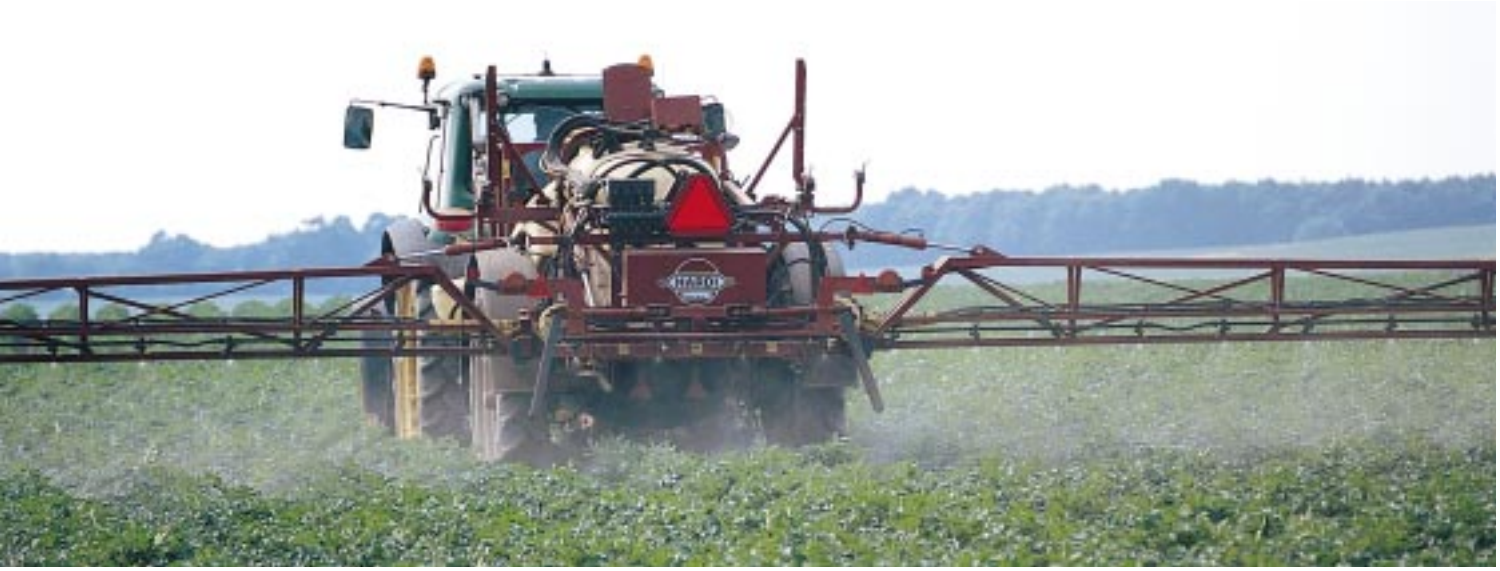
This report describes the state of nature in lowland England, and examines how a variety of pressures impact upon habitats and species. It identifies conservation successes achieved through positive action, and stresses the importance of working in partnership. It demonstrates that a landscape-scale approach to nature conservation is essential, but can only be delivered by involving people more actively, through integrating policies more effectively, and through successful partnership at regional and local levels. It illustrates how the approach described in the England Biodiversity Strategy of delivering wildlife gains through working in partnership across sectors, can be put into action.

We must enhance wildlife in lowland England for future generations. Paul Glendell/English Nature

England is internationally renowned for its diverse lowland landscapes, created through the effects of climate and land use on the rich and diverse geology and landforms. However, the wildlife resource in lowland England suffered major decline in the twentieth century due to the impact of human activities, particularly agriculture, forestry and development. In the last 20 years stronger protection for wildlife, combined with changes in grants and support payments, have significantly reduced the rate of ongoing loss, and indeed promoted some restoration and re-creation. The UK Biodiversity Action Plan (BAP) has stimulated a systematic programme for the recovery of rare and threatened habitats and species, and there have been significant gains, such as reedbed creation and heathland restoration, recovery of the otter, and the return of lichens to urban areas.

Habitat destruction has taken its toll on lowland England, so that the total area of semi-natural habitat is now quite small and often fragmented. Whilst continuing habitat loss is no longer the major threat to lowland habitats, this report shows that there **continues to be a decline in the quality of habitats**. It shows that 31% of the area of lowland SSSIs is in unfavourable condition. This is better than for upland habitats but is well below the Government's target level of having no more than 5% in unfavourable condition by 2010. Some habitats fare better than others, reflecting the success of recent conservation measures. Lowland heathlands and grasslands are benefiting from major funding schemes, whereas lowland raised bogs and rivers continue to suffer from human impacts.

The main pressures on lowland wildlife responsible for this poor condition are agricultural intensification, lack of appropriate management, water quantity and quality problems, and the effects of development, invasive species, atmospheric pollution, and climate change.



Intensive crop management with pesticides reduces wildlife on farmland and can also have impacts off-site.
Peter Roworth/English Nature

The main agricultural impacts are increased specialisation and intensification, and the associated use of pesticides. Some sites, such as small, isolated grasslands or heathlands, no longer fit within modern agricultural systems, and so are in decline through lack of appropriate management, particularly grazing. Agriculture also impacts upon wetlands, through diffuse pollution from fertiliser and manure, and through water abstraction for irrigation.

More than most other lowland habitats, wetlands are vulnerable to external pressures such as water abstraction. The health of wetland habitats for wildlife often depends on the management of the whole water catchment, not just what happens on individual sites. Damage to the water-holding capacity of a wetland can have impacts beyond the site, in particular flooding downstream. Wetlands are also particularly under pressure from non-native invasive species, which can force out our native wildlife. It can be very costly to control or eradicate these species. Many woodlands suffer from lack of appropriate management, such as the maintenance of open areas, and the impact of high deer numbers.

Development has a variety of impacts upon wildlife and geology, through new construction, associated infrastructure such as roads, mineral extraction, and water demand. Industrial and transport emissions are also a major contributor to atmospheric pollution, together with agricultural livestock. Climate change will be an additional pressure, and it will force species to shift their geographical range. This will be a problem if they are limited by their mobility or the availability of suitable alternative habitat.

Damaged wetlands and climate change can increase flooding. River Severn at Bewdley.
Paul Glendell/English Nature

These pressures and their cumulative effects mean that many remaining habitats are in poor condition, and are typically very fragmented and isolated within intensively-managed landscapes. Furthermore, the natural processes that we depend on, such as wetlands buffering flood waters, are being disrupted.

This report recognises the conservation successes that have been achieved, and identifies further action that is required to reduce the impact of each of the above pressures. It is clear that **a site-based approach alone will not meet England's national and international obligations for the conservation of habitats and species**, or many of the targets set under the UK BAP and the Public Service Agreements. The condition and resilience of protected sites must still be maintained or improved, since they act as wildlife refuges for threatened species, and are the core areas for the subsequent recovery and re-colonisation of land between these special sites. However,

the quality of the surrounding countryside is also vital. Nature conservation must now be achieved through a landscape-scale approach, which recognises that the demands of a modern economy will inevitably continue to influence land use in the lowlands. Integrated management of the whole landscape and water catchments is essential to facilitate recovery of biodiversity and increase the social and economic benefits that can be obtained through sustainable land use.

We highlight the value of nature to people, such as quality of life and economic benefits. We identify mechanisms that can be used to manage wildlife at landscape scales, to help fragmented and isolated habitat areas to be reconnected, managed properly, and set in a landscape that allows wildlife to flourish. The species within more resilient ecosystems will be better able to adapt to climate change. The mechanisms needed include more integrated policy frameworks that give greater importance to the protection of environmental assets, and promote the sustainable use of land, water and other environmental resources.

The report demonstrates the **progress that has been made on integrating wildlife into regeneration projects at the regional level, and there are excellent opportunities to develop these further**. Much of this is being achieved through partnerships, which incorporate sustainable tourism, spatial planning and environmental monitoring.

A vision for new lowland landscapes of England should be designed to integrate environmental and socio-economic objectives, and incorporate biodiversity as a valued and integral part of total land use. English Nature hopes that this report will stimulate further collaboration across all sectors of society, to achieve a brighter future for nature and its contribution to people's well-being.

The rare stone-curlew requires targeted agricultural management. Paul Glendell/English Nature

Unimproved grassland can be wildlife-rich and very attractive. North Meadow, Cricklade NNR. Stephen Davis/English Nature

The ten most critical actions required to deliver environmentally sustainable management in the English lowlands

Future landscapes for wildlife will need:

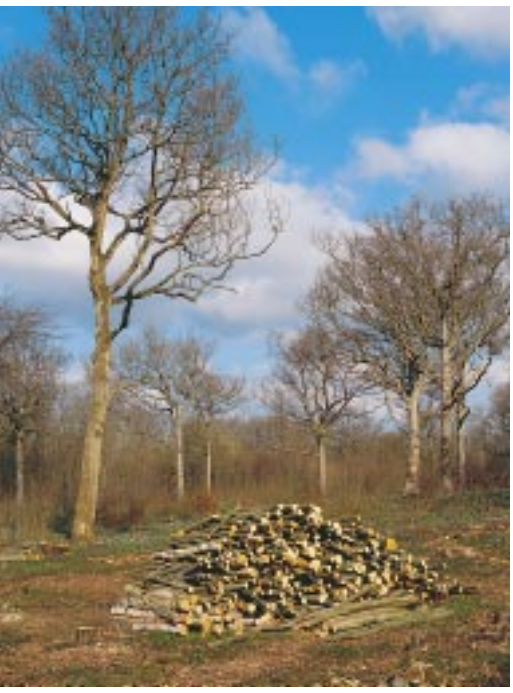
Investment in environmental quality and biodiversity recovery;

A landscape-scale approach to nature conservation;

Greater recognition of the value of nature to people's well-being and to the economy;

Integration of environmental goals within key economic sectors.

Active coppicing of woodlands for heath fritillary butterflies, Ham Street Woods NNR, Kent. Stephen Davis/English Nature



Invest in better environmental management and wildlife recovery on farms – Ensure the reforms of the Common Agricultural Policy (linked to a further transfer of funds to the England Rural Development Programme) raise the environmental standards of agriculture through implementing cross-compliance, developing and rolling-out the Entry Level and Higher Level Environmental Stewardship Schemes, achieving full decoupling of subsidy and production payments. Target reductions in use and greater selectivity of pesticides.

Stimulate appropriate management of farmland and woodland – Promote the economic and nature conservation benefits of wildlife-rich farmland and woodland, including appropriate grazing, marketing of niche products, and tourism initiatives.

Improve water management – Continue investing in measures to reduce point source pollution, and develop a package of measures to reduce diffuse pollution from phosphorus, nitrogen and silt. Ensure the Water Framework Directive is implemented appropriately, to deliver proper catchment planning for all waters important for biodiversity.

Restore wetland habitats – Implement a significant programme of river, wetland and floodplain restoration.

Reduce the threats and impacts from non-native invasive species – Through the formulation and implementation of a national strategy, reduce the most serious threats and risks, and target species for priority action.

Reduce the cumulative impacts of development - Implement sustainable development principles in land use planning, and promote environmentally sustainable communities that make a positive overall contribution to biodiversity targets.

Reduce the adverse effects of transport – Increase understanding of the cumulative impacts of current and planned projects, develop incentives to minimise the environmental impact of road and air transport, and achieve better integration between different modes of transport.

Reduce atmospheric pollution – Ensure the national Air Quality Strategy takes greater account of nature conservation objectives by developing measures to reduce critical ecosystem loads, and reduce diffuse pollution emissions, especially ammonia from intensive livestock units.

Adapt to the impacts of climate change – Ensure that agriculture, forestry and development planning policies, and regional strategies, incorporate actions to reduce habitat fragmentation, so that species can respond better to the inevitable effects of climate change over the next 50 years.

Improve management of the impacts of access and recreation – Improve understanding and appreciation of wildlife through tourism, increase partnership projects that create new wildlife areas for people to enjoy, and zone areas of high wildlife and recreational value.

ENGLISH NATURE

English Nature is the Government agency that champions the conservation of wildlife and geology throughout England.

This is one of a range of publications published by:
External Relations Team
English Nature
Northminster House
Peterborough PE1 1UA

www.english-nature.org.uk

Printed on Evolution Satin, 75% recycled post-consumer waste paper, Elemental Chlorine Free.

ISBN 1 85716 784 8

Catalogue code CORP1.55

Designed and printed by
Status Design & Advertising, 6M.

Front cover photographs:
Top left: Hatch Park, Kent.
Stephen Davis/English Nature
Bottom left: Bumblebees on a globe thistle.
David Townshend/English Nature
Main: Child amongst bluebells.
Stephen Davis/English Nature

INVESTOR IN PEOPLE