

# Target 2010 – East Midlands

The condition of the region's Sites of Special Scientific Interest



working towards *Natural England*  
for people, places and nature





Edale Valley, Edale SSSI, Peak District. Paul Glendell/English Nature 24,087

Sites of Special Scientific Interest (SSSIs) are the very best wildlife and geological sites in England. The Government has signed a Public Service Agreement (PSA) to ensure that, by area, 95 per cent of these sites are in the best possible condition (target condition) by 2010.

This publication is one of nine regional documents produced as sister publications to the national report *Target 2010 – the condition of England's Sites of Special Scientific Interest in 2005* (English Nature 2006). It reviews the current situation in the East Midlands and details the progress that has been made towards the 2010 target since September 2003. It summarises the major factors affecting SSSI condition and some of the key actions that need to be carried out over the next five years if the target is to be achieved in the region. The report should be read in conjunction with the Target 2010 report mentioned above, which sets the national context and also contains useful definitions of the Government's PSA for SSSIs, and what is meant by target condition.

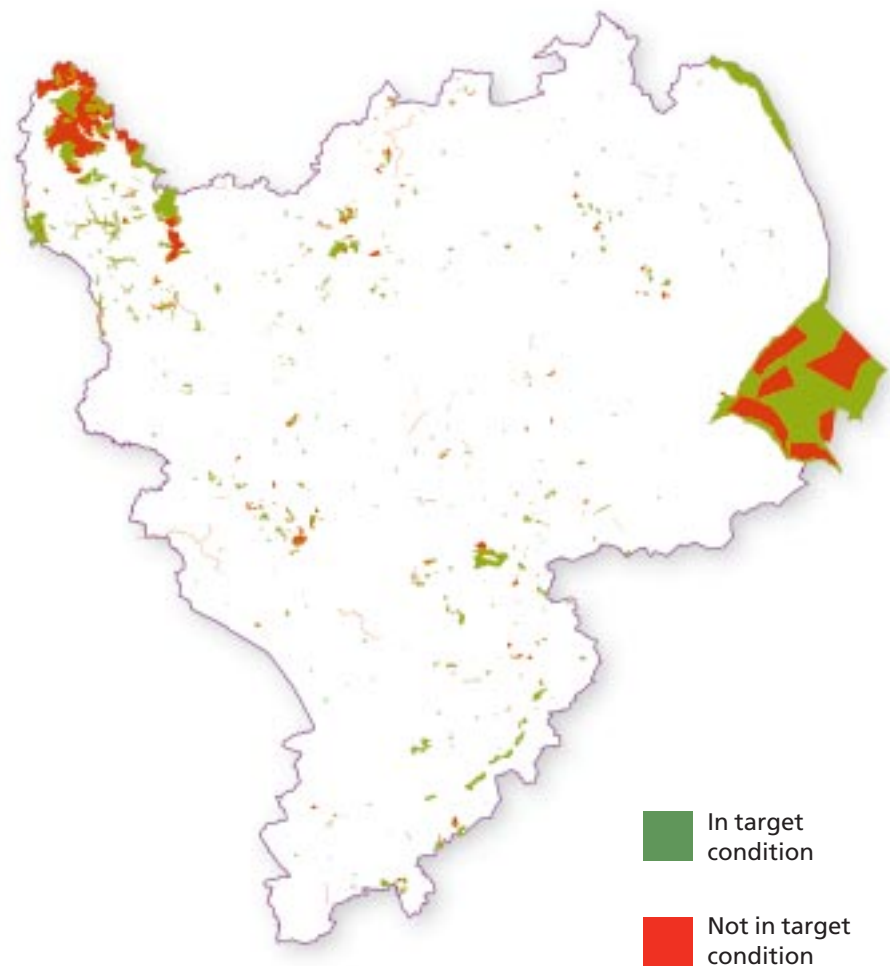
# The East Midlands picture

The East Midlands Region comprises the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire and Rutland. A region of contrasts, the East Midlands supports a diverse mix of wildlife and geological features. It starts amongst the dramatic moors and dales of the Peak District National Park, passes through the highly developed three cities triangle of Nottingham, Derby and Leicester, the ancient semi-natural woodlands of Sherwood Forest and extensive, intensively-managed lowlands with their meandering rivers, to Lincolnshire's spectacular unspoilt dune coastline and the vast saltmarshes of The Wash.

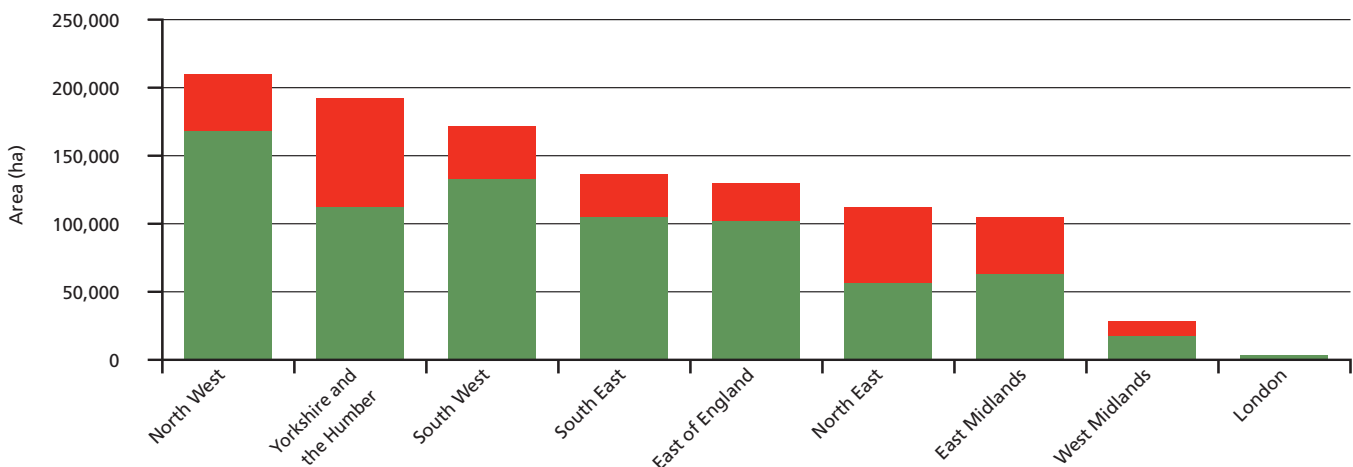
There are 393 SSSIs in the East Midlands covering almost 105,000 hectares – about 10 per cent of all SSSI land in England. This total is explained largely by the presence of The Wash (the single largest SSSI in England at over 60,000 hectares) and by the large areas of upland SSSI in the Peak District. The remaining SSSIs in the region are typically smaller and more isolated sites, including a large number of lowland woodland and grassland sites. Much of the SSSI land in the East Midlands is also designated as Natura 2000 sites (Special Areas of Conservation and/or Special Protection Areas) in recognition of the international importance of many of their special habitats and species.

Of the nine English regions, the East Midlands contains the third lowest area of SSSI in target condition (Figure 2). Only the North East and Yorkshire and the Humber Regions have a smaller percentage of their SSSI land in target condition.

**Figure 1** Distribution and condition of SSSI units in the East Midlands



**Figure 2** Area and condition of SSSIs in England's nine government regions



# Progress towards the 2010 target

In the past two years, excellent progress has been made towards the 2010 PSA target in the East Midlands. Back in September 2003, 50.9 per cent of SSSI land in the region was in target condition - a figure that, as of 31 December 2005, has risen to 59.5 per cent (Figure 3). While this is still some way behind the national figure of 69.8 per cent, it is still a very creditable achievement and, in terms of area, means that 10,000 hectares of SSSI have been brought into target condition during this period. This reflects the hard work of landowners, managers and organisations able to fund and deliver the necessary work, and often involves many years of careful land stewardship and management. However, with more than 42,000 hectares of SSSI land not achieving target condition, there is clearly still a great deal of effort required over the next five years in order to achieve the PSA target by 2010.

**Figure 3** Progress towards PSA target in the East Midlands since September 2003

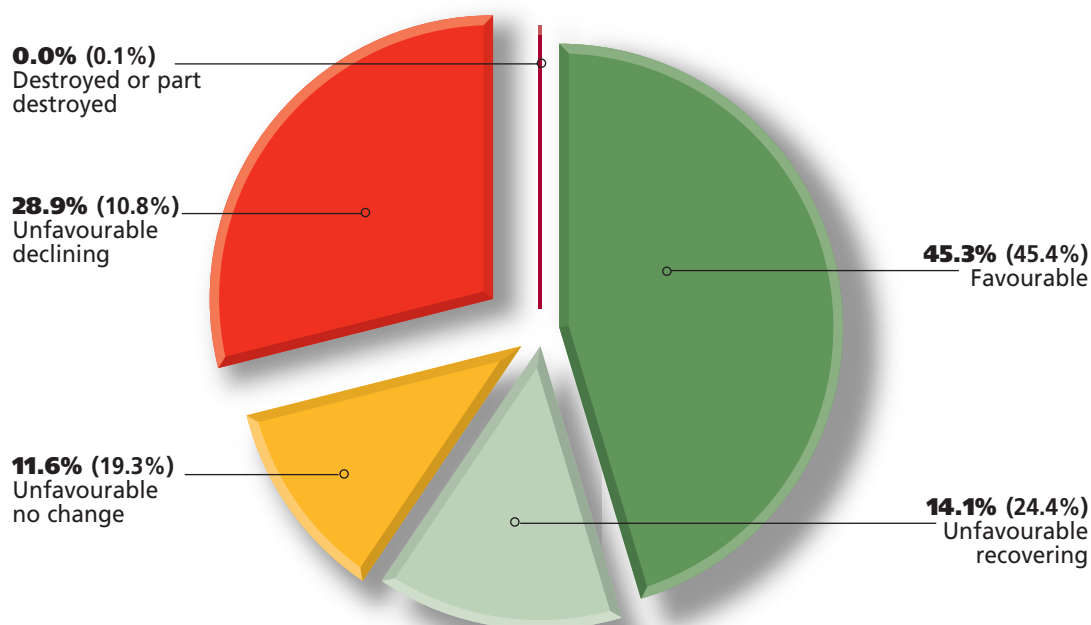
	In target condition		Not in target condition	
	%	Area (ha)	%	Area (ha)
September 2003	50.9	52,736	49.1	50,918
December 2005	59.5	62,101	40.5	42,332

All land designated as SSSI in England is part of the Government's 2010 PSA target. English Nature uses five categories to assess the condition of SSSIs. These categories (described in the national Target 2010 report) are

shown in Figure 4, which also compares the current regional and national positions. For the purposes of this report, however, we concentrate on the two main categories – SSSI land in target condition (made up of SSSIs in

favourable and unfavourable recovering condition) and SSSI land which is not in target condition (made up of SSSIs in unfavourable no change, unfavourable declining, part-destroyed or destroyed condition).

**Figure 4** Condition of SSSIs in the East Midlands at 31 December 2005 (national status in brackets)





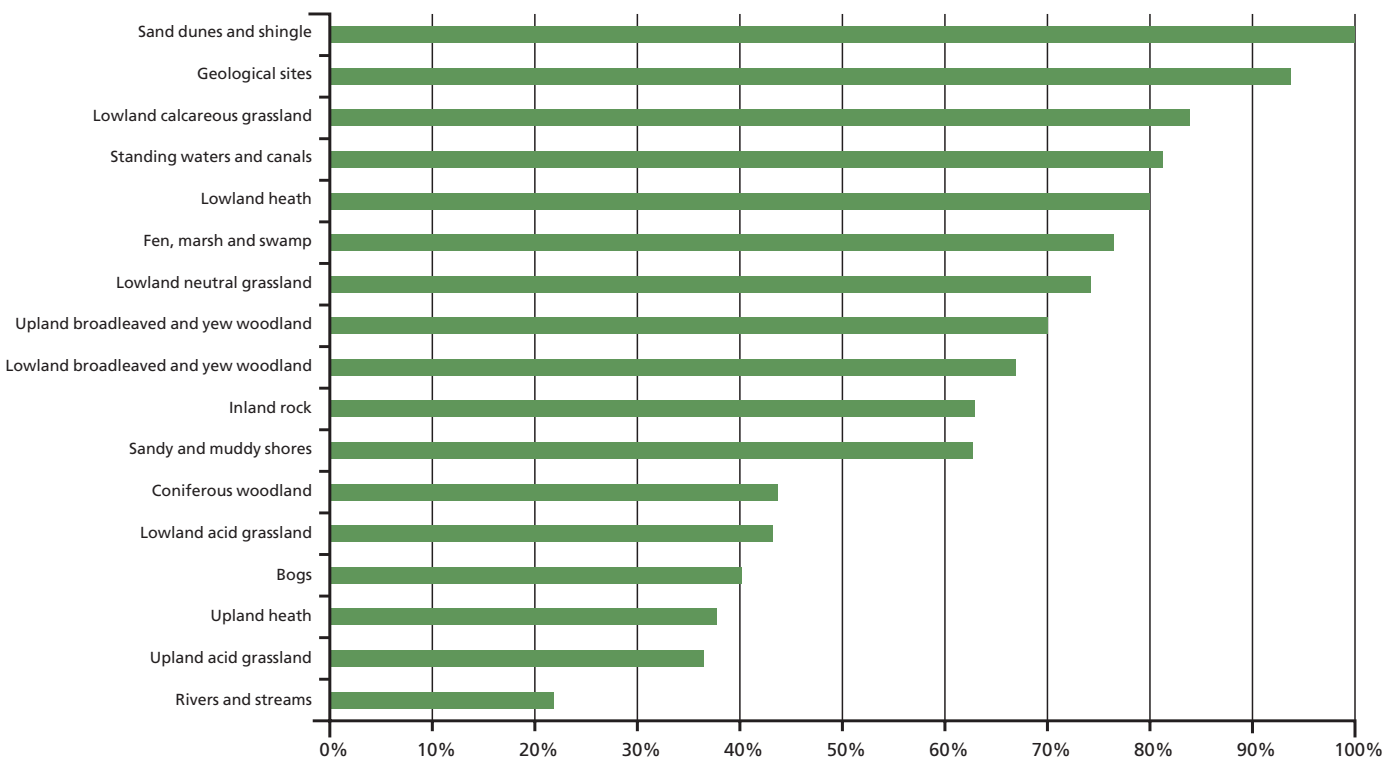


Black hairstreak, Banhaw, Spring and Blackthorn Woods SSSI, Northamptonshire. Pete Stroh/Natural Treasures

# Condition of SSSI habitats in the East Midlands

Nationally, SSSIs are broadly divided into 21 habitat types, 17 of which are found in the East Midlands. These range from the bogs and heaths of the uplands, through aquatic and lowland habitats, to geological sites and the specialised habitats of the coast. Figure 5 lists the main habitats found in the region and shows their condition at the end of 2005.

**Figure 5** SSSI habitats in the East Midlands (percentage in target condition)

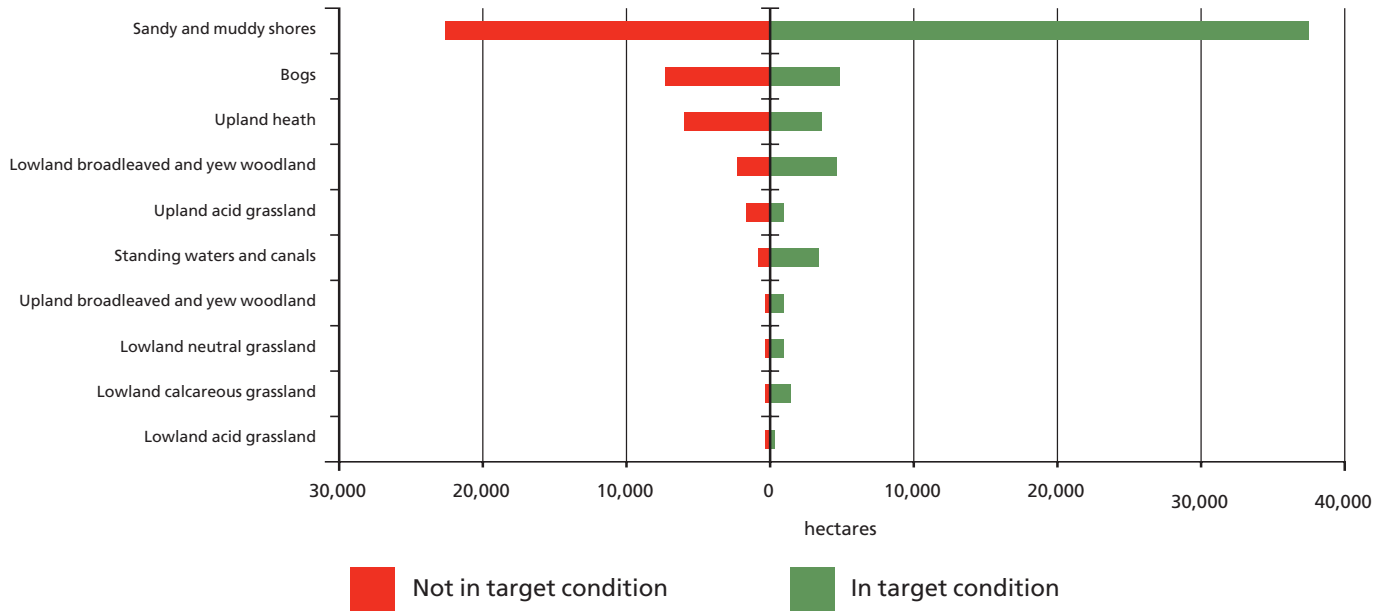


By percentage of area, the habitat in the worst condition is rivers and streams, as is the case nationally. Although not a major contributor to the overall area of SSSI in the East Midlands, the condition of this habitat is still cause for serious concern as, in some cases, it can affect the condition of other SSSI habitats. By 2010, we want to see all

habitats in the region in good condition including rivers and streams. However, as Figure 6 shows, the area of each SSSI habitat varies widely and, inevitably, a sharper focus is brought to those habitats where the largest areas of land can be brought into target condition. In the East Midlands, this means prioritising efforts on the upland

and coastal habitats that can make the greatest contribution to the 2010 target. Of the 42,000 hectares of SSSI land still not reaching target condition in the East Midlands, nearly 36,000 hectares can be accounted for by just three habitats – upland heath and bogs in the Peak District, and sandy and muddy shores on the Lincolnshire coast.

**Figure 6** SSSI habitats in the East Midlands – top ten in order of greatest area that is not in target condition



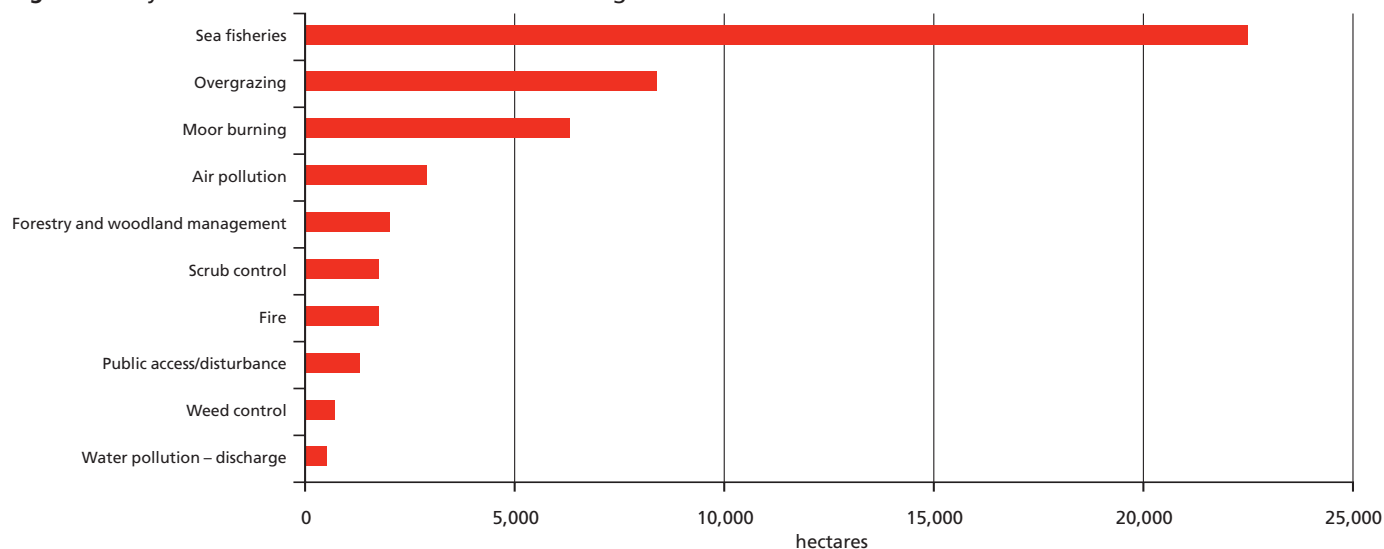
Kinder-Bleaklow, Dark Peak SSSI, Derbyshire. Peter Wakely/English Nature 12,975



# Why some habitats in the East Midlands are not in target condition

The main reasons why some SSSI land is not in target condition are well understood, as are the type of habitats on which they impact, although the solutions are often complex. Nationally English Nature has identified 42 different causes, a comprehensive description of which is provided in an earlier publication (*England's best wildlife and geological sites – The condition of Sites of Special Scientific Interest in England in 2003* - English Nature, 2003). Figure 7 shows the main causes for the East Midlands by area.

Figure 7 Why SSSIs in the East Midlands are not in target condition



In many cases, a single SSSI will be affected by a range of factors that prevent it from being in target condition. For example, many upland SSSIs are affected by overgrazing, moor burning and air pollution (and other causes). In such situations, each cause must be tackled and resolved or else the site will not reach target condition – again emphasising the huge challenge to bring upland sites into the Government's PSA target for SSSIs.

## Sea fisheries – 22,495 hectares

As inshore fishing techniques have become more intensive, their impact on SSSIs has increased. For example, fishing by bottom dredging and suction dredging can be particularly damaging, unintentionally destroying reefs and mussel beds and disturbing the natural conditions of the sea

bed. In the East Midlands, this issue is confined to The Wash.

## Overgrazing – 8,348 hectares

The majority of overgrazing in the region occurs on moorlands, and for the Peak District this is the single most significant cause why this SSSI land is not in target condition. Grazing by too many sheep can quickly turn heath into species-poor grassland.

Overgrazing also leads to soil erosion and can affect water quality as run-off increases and causes higher river flows and siltation. Over the last 15 years, there have been reductions in stocking levels in the North and South West Peak thanks to Defra's Environmentally Sensitive Area (ESA) Schemes. Whilst this has brought major improvements it has not always reduced the levels to those required to deliver target

condition and some further reductions are needed, especially of winter stocking levels.

## Moor burning – 6,301 hectares

Managing upland habitats by burning has been practised for centuries. Done well, it can help sustain the animals and plants that rely on heathland. However, poorly managed or too frequent burns, or those on sensitive habitats can cause damage. English Nature is working with grouse moor managers to try and address these issues in a way that is compatible with grouse moor management and conservation objectives. Regionally the requirement for Moorland Management Plans under Defra's Environmentally Sensitive Area schemes provides the main positive way forward to agree burning regimes.



At the time of publication the first few plans have been agreed. The agreement of such plans will be a very public and positive demonstration that grouse moor management can be compatible with achieving wider nature conservation on upland SSSIs.

### **Air pollution – 2,887 hectares**

Air pollution is a major factor for uplands in the Peak District, particularly in the South Pennines, which have suffered from high levels of air pollution since the Industrial Revolution – notably sulphur and nitrogen, but also heavy metals, which over time

have degraded large areas of moorland. Current air pollution levels may also be having an impact. Research has shown that nitrogen depositions from diffuse sources such as vehicles, settlements and agriculture are causing soil enrichment on some sites. A key challenge will be to see if SSSIs can be brought into target condition despite high (but slowly decreasing) pollution levels.

### **Forestry and woodland management – 2,037 hectares**

Many of our best woodlands have developed as the result of centuries of traditional

management, such as coppicing. However, over the last century in particular, demand for the traditional products of woodland management, such as charcoal and hurdles has virtually disappeared and many ancient woodlands are no longer being managed. Consequently, many plants and animals that people most associate with English woodland, such as bluebells, dormouse and butterflies have disappeared from our woodlands as management systems have been discontinued. In other cases, the presence of non-native species can affect the naturalness of woodlands.



Ancient beech, Clumber Park SSSI, Nottinghamshire. Peter Wakely/English Nature 21,624



# The county picture

Just as there are obvious differences in the issues and problems facing the East Midlands when compared to the other English regions, there are differences within the region. For each county in the East Midlands the main reasons why SSSI land is not in target condition can be summarised as follows:

## ● **Derbyshire and The Peak District**

**(47% in target condition)**

Overgrazing, moor burning and air pollution are the three major causes on SSSIs in the Peak District. There are also woodland management issues such as grazing, which prevents regeneration of trees and ground flora, and the establishment of non-native species, which damage the naturalness of woodland. In the ashwoods of the White Peak, the Ravine WoodLIFE project is seeking to address these problems, providing financial support and advice to land managers. Other key factors in the Peak District include public access and disturbance from the high number of visitors to the National Park, water pollution, moorland drainage and undergrazing on some calcareous grasslands.

In lowland Derbyshire, the area of SSSI land not in target condition is a fraction of that in the Peak District. There are a wide variety of sites and habitats and consequently a mix of reasons for not meeting target condition. The main issues are invasive non-native species in woodland and open water habitats, undergrazing of grassland and fen habitats, and maintenance of geological sites.

## ● **Leicestershire**

**(66.7% in target condition)**

Most of Leicestershire's SSSIs are ancient woodlands or grasslands, but two rivers and three canals are also notified. The exception is Charnwood,

which contains heathland and a number of geological sites and reservoirs. Reasons for not meeting target condition are focused on three of these habitats with lack of woodland management being the single biggest issue. Water quality in river and reservoir SSSIs is also a concern, with large areas affected by both diffuse and point source pollution. Grassland and heathland sites are suffering from undergrazing and a lack of scrub control.

## ● **Lincolnshire**

**(63% in target condition)**

Lincolnshire's SSSIs are dominated by The Wash, which makes up 85 per cent of the county's notified area. Regionally, the main reason for not meeting target condition is sea fisheries or, more precisely, shell fishing – all of it in The Wash, and accounting for 91 per cent of SSSI land not in target condition in the county. Other important issues are a lack of effective management and invasive species in woodlands, and the need for scrub control on open habitats such as heathland and grasslands. Another problem, unusually for lowlands, is overgrazing - in this case, of saltmarsh on The Wash.

## ● **Northamptonshire**

**(83.6% in target condition)**

Up until recently, Northamptonshire had one of the lowest levels of SSSI coverage in England. Recent notification of The Upper Nene Gravel Pits has changed this and the large site now accounts

for a third of the county's SSSI area. It also helps to explain why Northamptonshire has such a high percentage of SSSI land in target condition. As is the case elsewhere in the region, many woodland SSSIs are not meeting the target, due to a need for woodland management and a largely unmanaged deer population. Other problems include undergrazing and lack of scrub and weed control on grassland sites.

## ● **Nottinghamshire**

**(66.5) in target condition**

In addition to large areas of woodland, Nottinghamshire, uniquely to the region, contains a large area of lowland heath. There are also sizeable areas of open-water as a result of recent gravel workings and longer-standing lakes created as part of the Dukeries in the north of the county. The reasons for not meeting target condition reflect these habitats, with water quality and woodland management issues at the forefront. In addition some heathlands and grasslands in the county are affected by undergrazing and a need for scrub management.

## ● **Rutland**

**(84.7% in target condition)**

The smallest county in the region has the highest percentage of SSSI in target condition. Currently the main problems are with woodland management and deer control. There are also issues for grasslands, where overgrazing, weed and scrub encroachment must be tackled.

# The road to 2010

At the end of 2005, we know that 59.5 percent of the East Midlands SSSIs are in target condition. We also have a good understanding why the remaining 40.5 per cent are not. Over the next five years the challenge is to ensure that this remaining area meets the 2010 target, and that SSSIs already in target condition stay that way. To achieve this we need to be absolutely clear about what needs to be done, and by whom.

To tackle this critical step, English Nature established a Remedies Project in 2004 which has drawn together detailed information on every SSSI in the region. Each SSSI may be sub-divided into separate units, depending on habitat type and management of the site. For each unit not in target condition, the project:

- defines the actions to address these causes;
- details the mechanisms to enable the necessary actions to be carried out;
- identifies the organisations and individuals best placed to implement those actions and mechanisms, and
- enables and secures the agreement of land managers to ensure the actions are carried through.

Figure 8 lists the five most important remedies identified for the East Midlands, in terms of the area of SSSI that can be brought into target condition.

**Figure 8** Remedies for bringing SSSIs into target condition in the East Midlands – the top five (by area)

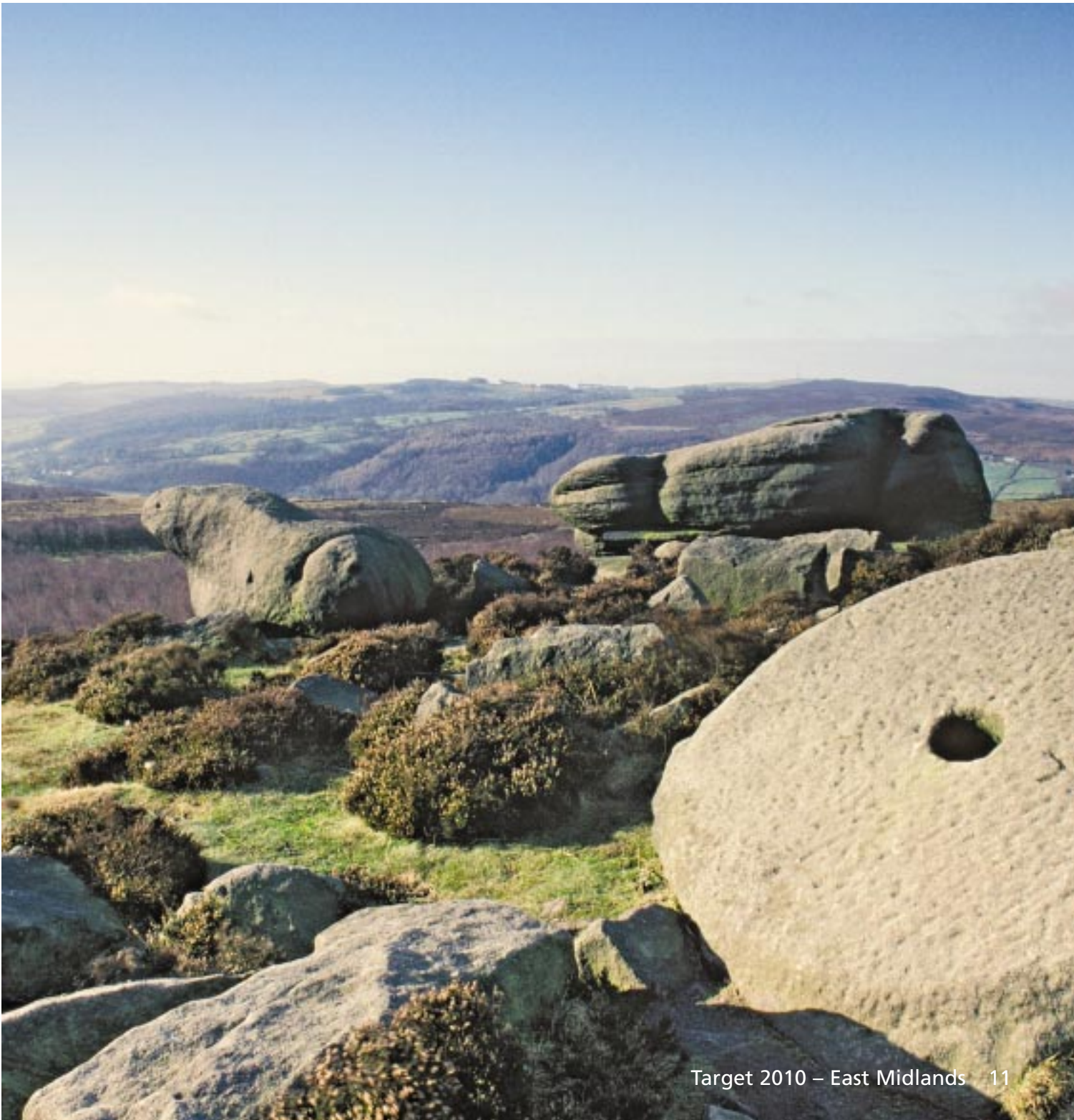
Remedy	Organisations who can help deliver the remedy	SSSI habitats that will benefit most from the remedy	Area of SSSI that would benefit from the remedy (ha)
Make new byelaws or enforce existing ones	Eastern Sea Fisheries Committee	Sandy and muddy shores	22,495
New/renew management agreements	English Nature	Bogs, upland heath, lowland broadleaved and yew woodland	12,219
Modify existing Environmentally Sensitive Area schemes	Defra Rural Development Service	Bogs, upland heath, upland acid grassland	11,311
Issue of appropriate notices and consents under Section 28e of the Wildlife and Countryside Act	English Nature	Bogs, upland heath, upland acid grassland	10,010
Review of discharge/pollution, prevention and control consents	Environment Agency	Bogs, sandy and muddy shores	2,928



## Remedies in action

The Heritage Lottery-funded Moors for the Future (MFTF) Project, working in conjunction with Defra's ESA Scheme, is a great example of how the major and costly problems of the Peak District Moors can be tackled. MFTF is a partnership project involving all the key players in the area, including major moorland landowners such as the National Trust, United Utilities and Yorkshire Water. Key components of the project are restoration of moorland severely damaged by wildfires, overgrazing and heavily eroded footpaths. These activities are having a major impact on delivery of the 2010 target. In one example, a combination of ESA and MFTF funding on Bleaklow has paid for the removal of stock and the commencement of re-vegetation works to restore 2,000 hectares of the most damaged areas of moorland. Stock exclusion should allow the less damaged areas to recover naturally. In the long term, once the restoration is complete, a more sustainable grazing regime can be reintroduced.

Another example is where English Nature has funded stock reductions by tenants on a large area of Peak District National Park Authority land above and beyond what an existing Countryside Stewardship Scheme had been able to achieve. It is often a combination of partners and mechanisms that is needed to achieve target condition.





# Working together

As is clear from the preceding examples, an enormous amount of credit is due to the partner organisations and individuals whose efforts have led to the significant advance towards the 2010 target in the last two years. Without such close partnership working, we would be some way behind the current position. The continuation of this approach is essential if the target is to be achieved.

Bee orchid, Saltfleetby-Theddlethorpe Dunes SSSI, Lincolnshire. Pete Stroby/Natural Treasures





**Figure 9** Major landowners and the condition of their SSSIs in the East Midlands at the end of 2005

Organisation	Total area (ha)	Area of SSSI in target condition (ha)	Area of SSSI in target condition (%)
Crown Estate (Marine)	47,441	29,414	62%
National Trust	13,555	3,650	27%
Water Companies	11,977	5,360	45%
English Nature	9,602	5,213	54%
MoD	5,900	3,996	68%
National Parks	4,904	3,954	81%
RSPB	2,954	1,569	53%
Wildlife Trusts	2,715	2,465	91%
Forest Enterprise	2,034	1,191	59%
Crown Estate (Rural)	1,522	808	53%

Of all the partners that English Nature works with in the East Midlands, a small number manage large areas of SSSIs. These partners are described as the Major Landowners Group and they have a particularly critical role to play in adopting remedies and bringing SSSIs into target condition. Figure 9, provides a summary of the area and condition of SSSI holdings for the major landowners in the region at the end of 2005.

This table shows the area of land owned by each body. It does not necessarily reflect who is responsible for a SSSI not being in target condition. In many cases, there will be one or more reasons why the named landowner is not in a position to do anything about an SSSI not meeting the target condition. At the time of going to press, English Nature is working to reach final agreement with our partners to identify, in such situations, which organisation is responsible for taking action. In the near future

we will be able to show the area of SSSI holding for which the individual landholder has agreed responsibility.

The table does not of course capture ongoing work that has yet to reach fruition. For example, the National Trust is working very hard with English Nature and their farming and shooting tenants in the Peak District to agree moorland management plans that will enable land to go into recovering condition.

# Why the PSA target is so important

The protection of SSSIs has long been considered essential to the conservation of England's wildlife habitats and natural features, but there is an increasing awareness of the wider value of these special sites. Firstly, by protecting particular habitats, many species, rare or otherwise, are conserved. Secondly, SSSIs perform many important 'ecosystem services' – upland moorlands that provide our water, saltmarshes that protect our coasts from rising seas, and natural floodplains that buffer towns from flash flooding. Last but not least, SSSIs create social wealth, by offering people the simple enjoyment of a quiet walk in the countryside, and economic wealth through the opportunities they provide for local and regional ecotourism.

Achieving the 2010 target will ensure that these benefits can be secured for future generations. Nationally, English Nature firmly believes the target is both realistic and achievable. The following are the key messages we need to heed and act on if the target is to be achieved in the East Midlands:

- Building on the successful partnerships that have delivered target condition, and developing new ones.
- Ensuring that land already in target condition does not slip backwards. Where the management needed to achieve this is ongoing (for example, a grazing regime), long-term public funding through agri-environment schemes may be needed.
- Ensuring that there is a sustained level of input and resources to deliver the 2010 target through land management schemes, such as existing ESA agreements, Environmental Stewardship and the England Woodland Grant Scheme.
- The major landowners have a pivotal role in determining whether the 2010 target is achieved, through both their own action and initiative and, crucially, how they encourage their tenants to engage in delivery.
- Agreement with grouse moor managers is very important to delivery in the Peak District.
- Tackling the remaining problems requires creative solutions, such as the EC-funded Ravine WoodLIFE project. These approaches may have a broader remit than SSSI condition.

The responsibility for overseeing progress towards the 2010 target passes from English Nature to *Natural England* later this year. The creation of the new organisation has already begun, with English Nature, the Landscape, Access and Recreation elements of the Countryside Agency, and the environment activities of Defra's Rural Development Service working together as partners. Since April 2005, this natural partnership has been working together to deliver joint outcomes and pave the way for *Natural England* whilst continuing to deliver their separate and respective statutory duties. Achieving the 2010 PSA target will remain a vital area of work for the new organisation.









English Nature, the Rural Development Service and the Countryside Agency. Working in partnership to conserve and enhance our landscapes and natural environment, to promote countryside access and recreation as well as public well-being, now and for future generations.

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Top left: Oak leaves in Sherwood Forest, Birklands and Billhaugh SSSI, Nottinghamshire. Peter Wakely/English Nature 18,529

Middle left: Sand dunes, Saltfleetby-Theddlethorpe Dunes SSSI, Lincolnshire. Paul Glendell/English Nature 24,178

Bottom left: Charnwood Lodge SSSI, Leicestershire.

Paul Glendell/English Nature 25,790

Main: Bird's-foot trefoil, Cressbrook Dale SSSI, Derbyshire.

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