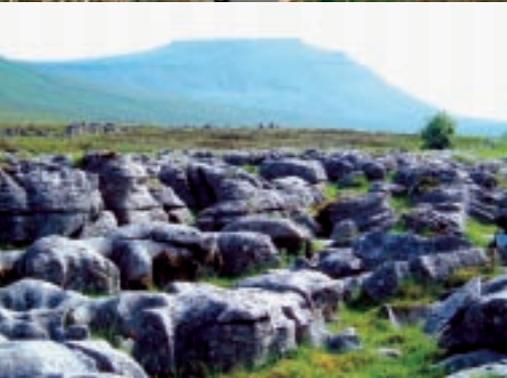


Target 2010 – Yorkshire and the Humber

The condition of the region's Sites of Special Scientific Interest in 2005



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



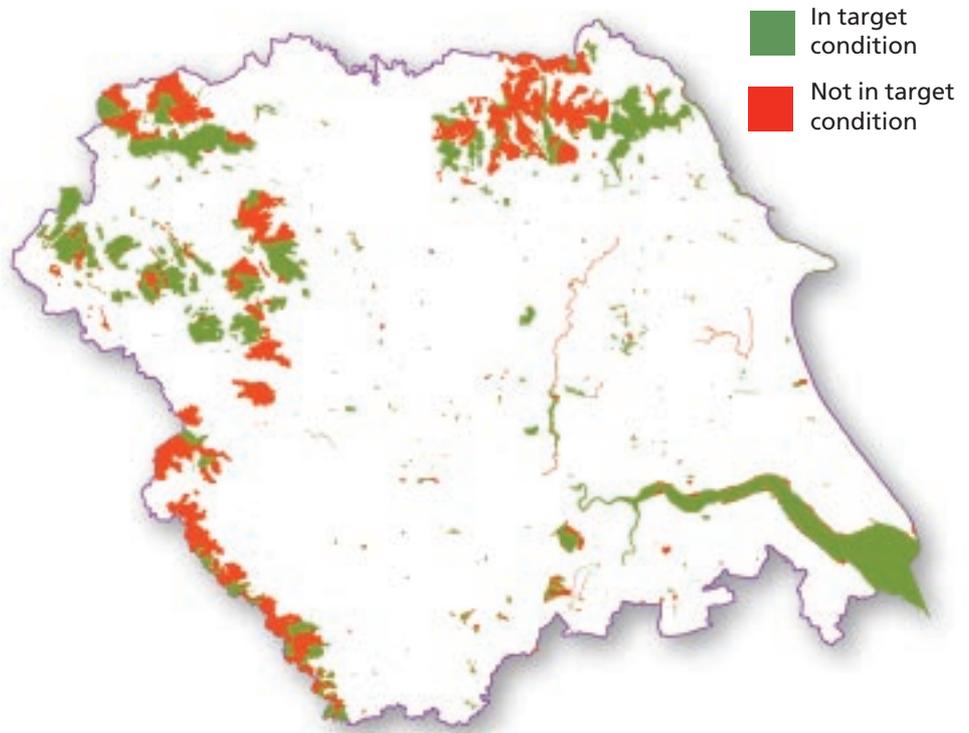
Sites of Special Scientific Interest (SSSIs) are the very best wildlife and geological sites in England. The Government has signed a Public Service Agreement (PSA) to ensure that, by area, 95 per cent of these sites are in the best possible condition (target condition) by 2010.

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 Yorkshire and the Humber 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 for this document, and also contains useful definitions of the 2010 PSA for SSSIs and what is meant by target condition.

Yorkshire and the Humber picture

The region of Yorkshire and the Humber covers most of the traditional county of Yorkshire, along with the part of northern Lincolnshire that was previously in Humberside. It is a region of sharp contrasts, and home to a rich and diverse wildlife from the internationally important limestone pavements of Ingleborough to the sea cliffs at Bempton and Flamborough, which support the largest seabird colony in England. The natural beauty of the region, typified by its National Parks, brings in visitors from all around the country.

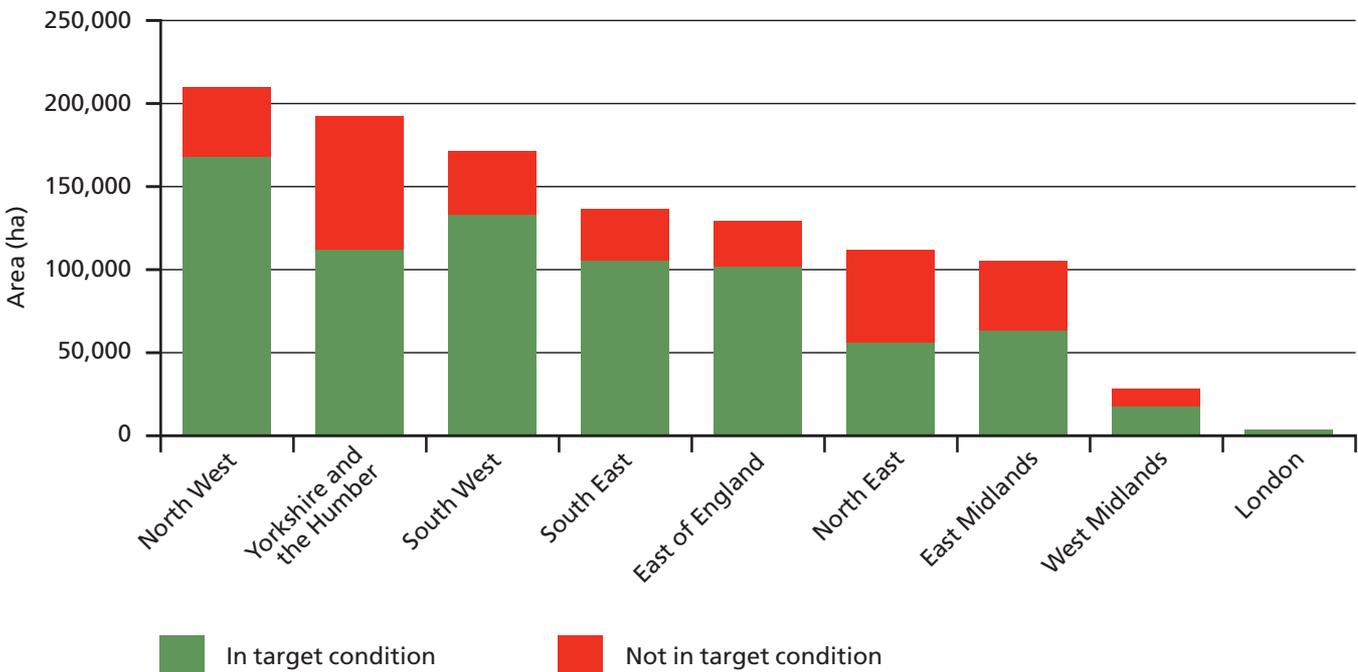
Figure 1 Distribution and condition of SSSI units in Yorkshire and the Humber



There are 374 SSSIs in Yorkshire and the Humber covering 180,000 hectares - more than 17 per cent of all SSSI land in England. This is a significant proportion of the national total, explained in part by the large areas of upland moorland and limestone grassland and also by the extensive Thorne and

Hatfield Moors and the Humber Estuary. Of the nine English government regions, only the North West has a larger area of SSSI land (Figure 2). However, only the North East region has a lower percentage of SSSI land in target condition than Yorkshire and the Humber's 58.3 per cent.

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 Yorkshire and the Humber. Back in September 2003, 43.6 per cent of SSSI land in the region was in target condition - a figure that, as of 31 December 2005, has risen to 58.3 per cent (Figure 3). While this is still some way behind the national figure of 69.8 per cent, the swing to target condition is a very impressive achievement. In terms of area, it means that 37,000 hectares of SSSI land have been brought into target condition within the timeframe. 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 78,000 hectares of SSSI land not in target condition, there is clearly still a great deal of effort required over the next five years in order to achieve the 2010 PSA target.

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 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).

River Derwent with marsh marigold, Raincliffe and Forge Valley Woods SSSI, North Yorkshire. Peter Wakely/English Nature 13,717



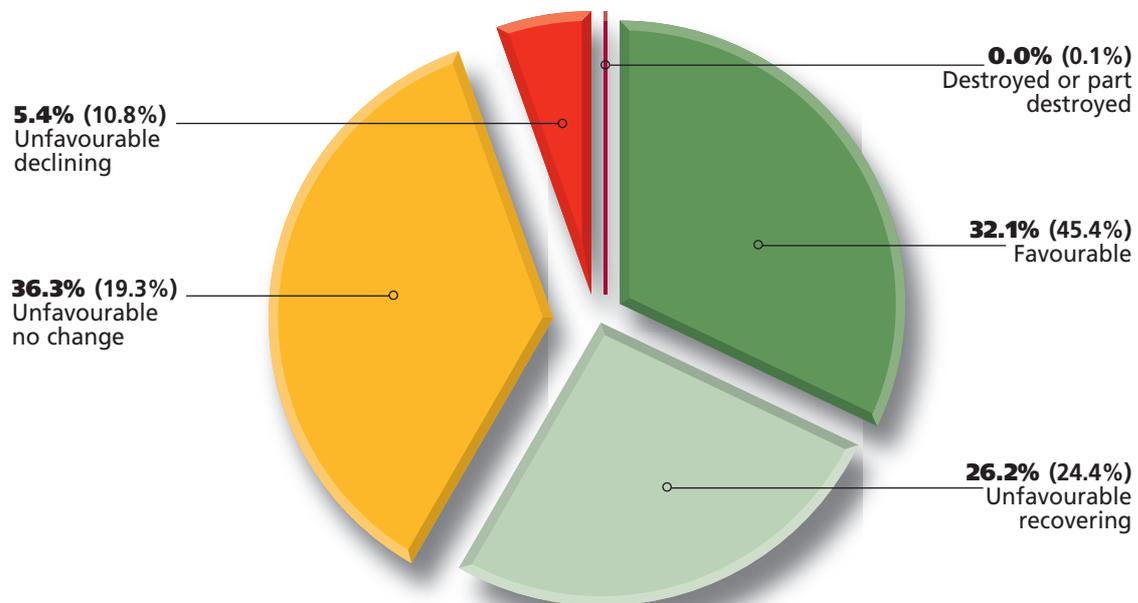


Bladderwrack seaweed at Flamborough Head SSSI. Peter Wakely/English Nature 17,355

Figure 3 Progress towards PSA target in Yorkshire and the Humber since September 2003

	In target condition		Not in target condition	
	%	Area (ha)	%	Area (ha)
September 2003	43.6	72,994	56.4	94,239
December 2005	58.3	109,906	41.7	78,604

Figure 4 Condition of SSSIs in Yorkshire and the Humber at 31 December 2005 (national status in brackets)



Condition of SSSI habitats in Yorkshire and the Humber

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

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 SSSIs in Yorkshire and the Humber, the condition of this habitat is still cause for serious concern. 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 Yorkshire and the Humber, this

means prioritising efforts on the habitats which can make the greatest contribution to the 2010 target. Of the 78,604 hectares of SSSI land still not reaching target condition in the region, over 70,000 hectares can be accounted for by just two upland habitats – upland heath and bogs.

Figure 5 SSSI habitats in Yorkshire and the Humber (percentage in target condition)

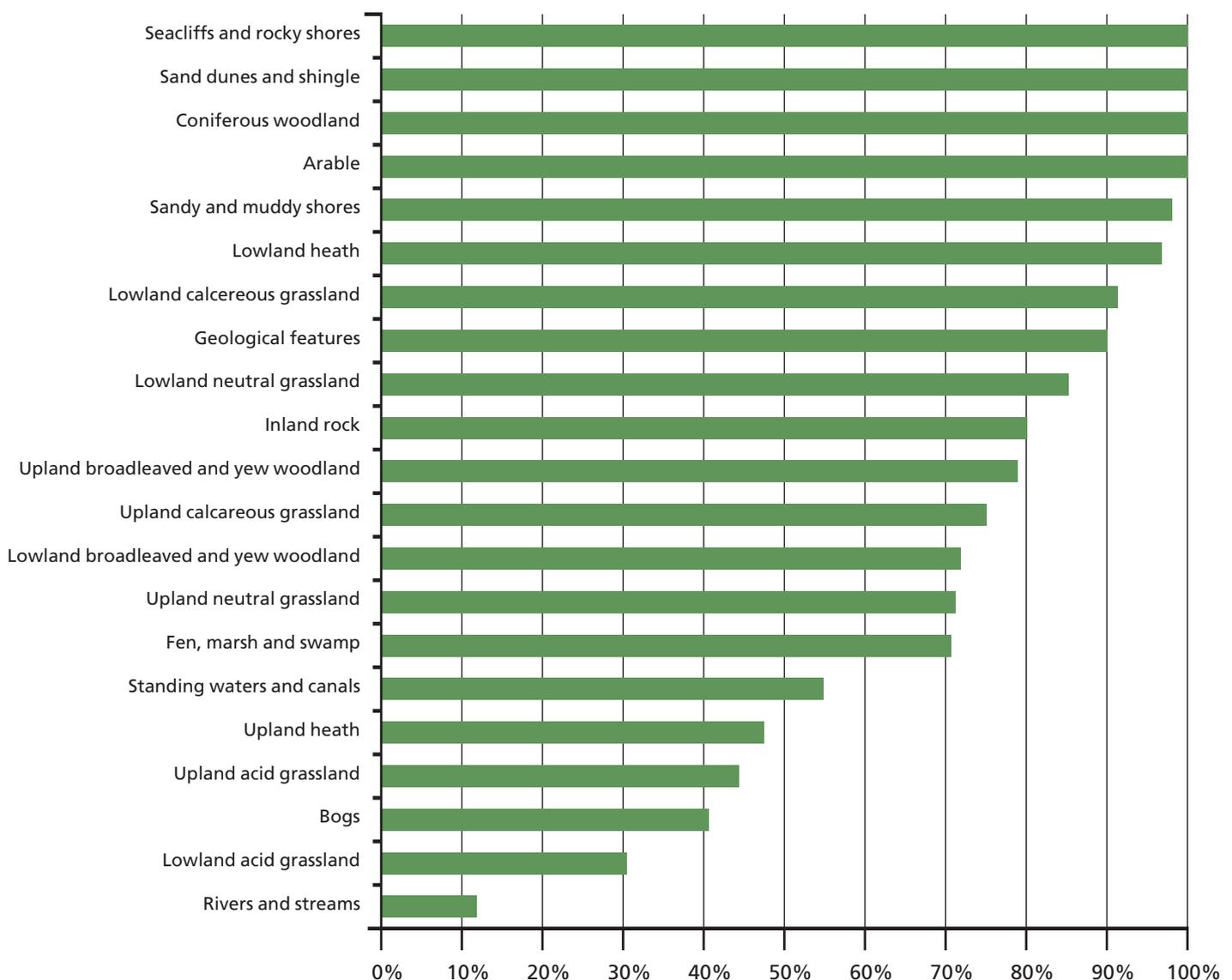
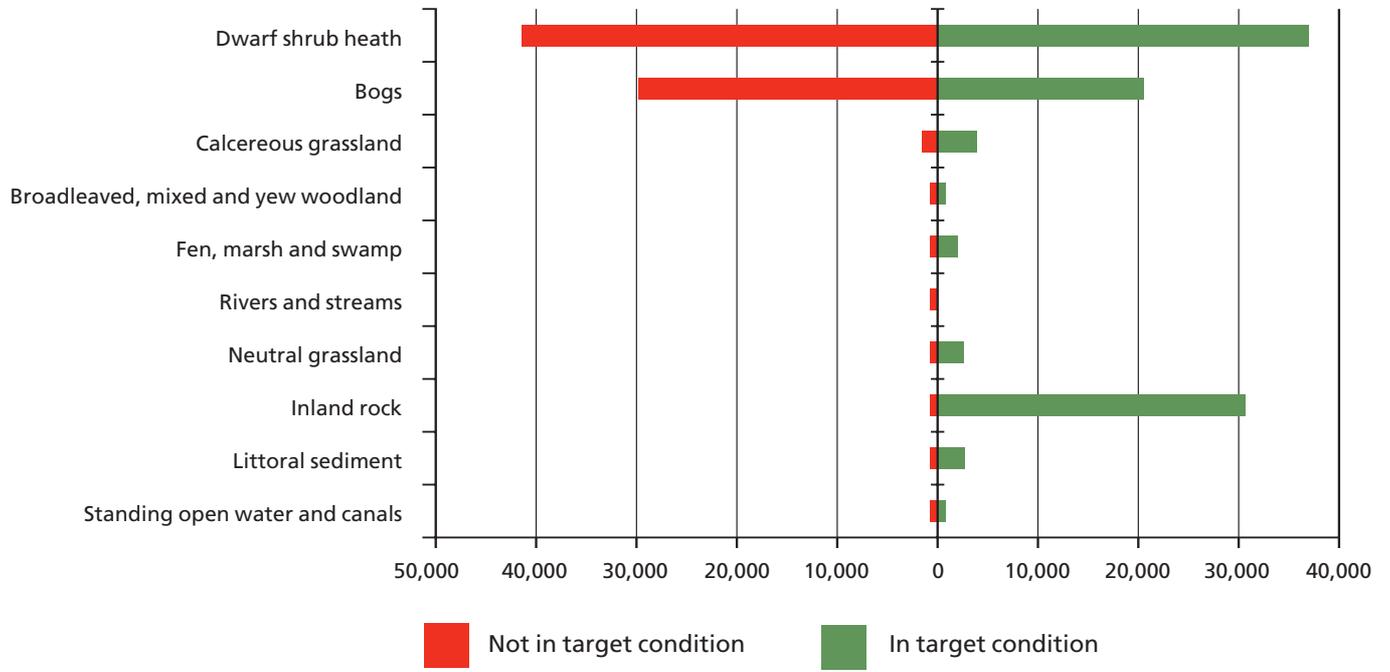


Figure 6 SSSI habitats in Yorkshire and the Humber – top ten in order of greatest area that is not in target condition



Hole of Horcum SSSI, North Yorkshire. Peter Wakely/English Nature 12,750



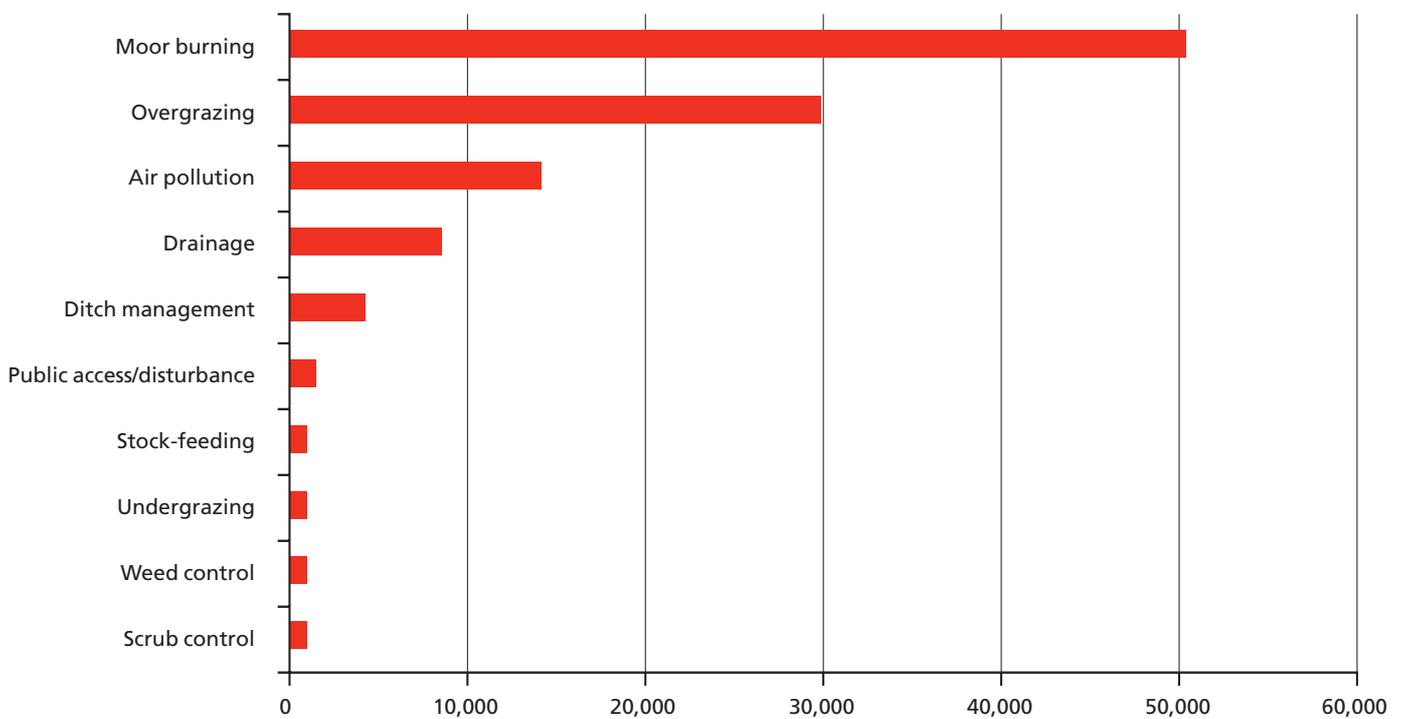
Why some habitats in Yorkshire and the Humber are not in target condition

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. 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, by area, the main causes for Yorkshire and the Humber region.



Cranberries, Malham-Arncliffe SSSI, North Yorkshire. Pete Stroh/Natural Treasures

Figure 7 Why SSSIs in Yorkshire and the Humber 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, a single SSSI may be affected by all of the above causes, each of which must be tackled and resolved or else the site will not meet target condition. This underlines just how difficult it will be to achieve the 2010 target for regions like Yorkshire and the Humber which contain extensive areas of upland.

Moor burning – 50,119 hectares

Managing upland habitats by burning has been practised for centuries. Done well, it can be very positive, creating ideal conditions for the animals and plants that rely on heathland. However, when fires are too hot or frequent they can be very damaging, accelerating soil erosion and rapidly reducing species diversity, leading to dominance of heather at the expense of other dwarf shrubs and mosses. It also simplifies the age structure leading to the loss of ‘old growth,’ the preferred habitat of birds such as the merlin.

Overgrazing – 29,748 hectares

Grazing by too many sheep can quickly turn moorlands from heathland 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. Nationally, this is the single biggest problem affecting our upland SSSIs, and one that also occurs in bog, limestone grassland and woodland habitats.

Air pollution – 14,093 hectares

Atmospheric pollution has had a significant impact on many of England’s uplands. Industrial and agricultural activities have generated pollution from ammonia, or sulphur dioxide for example, which disrupts natural processes, often resulting in damage to delicately balanced ecosystems. The result is a loss of sensitive plant and invertebrate communities and a reduction in species diversity.

Drainage – 8,418 hectares and Ditch management – 4,123 hectares

Artificial drainage is a significant cause of upland SSSIs not meeting target condition, particularly in combination with overgrazing and unsuitable burning regimes. It causes direct loss of habitat and soils, with indirect impacts on water quality and sediment loadings in rivers. Peatlands have an important role to play in buffering against climate change. Draining them reduces their ability to absorb carbon. The blocking of drains remains a priority in order to prevent further damage to these precious upland habitats.



Shelduck and brent geese on mudflats at Humber Estuary SSSI, East Riding of Yorkshire. Paul Glendell/English Nature 25,942

The county picture

Just as there are obvious differences in the issues and problems facing Yorkshire and the Humber compared to the other English regions, there are differences within the region. For each county in the region the key causes for SSSI land not being in target condition can be summarised as follows:

- **North Yorkshire (55.8% in target condition)**
Inappropriate grazing, burning and drainage regimes.
- **West and South Yorkshire (17.5% and 42.5% in target condition respectively)**
Atmospheric pollution, inappropriate grazing, burning and drainage regimes.
- **Humberside (94.9% in target condition)**
Sea-level rise, coastal squeeze.

The road to 2010

At the end of 2005, we know that 58.3 per cent of Yorkshire and the Humber's SSSIs are in target condition. We also have a good understanding why the remaining 41.7 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 Yorkshire and the Humber in terms of the area of SSSI that can be brought into target condition.

Figure 8 Remedies for bringing SSSIs into target condition in Yorkshire and the Humber – 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)
New/ renew Management Agreements	English Nature	Bogs, Upland heath	42,082
Issues of appropriate notices and consents under Section 28e of the Wildlife and Countryside Act	English Nature	Bogs, Upland heath	25,405
Tenancy negotiations	Water Companies	Upland heath	18,917
Review of discharge/pollution, prevention and control consents	Environment Agency	Bogs	13,282
Modify existing Environmentally Sensitive Area schemes	Defra Rural Development Service	Bogs, Upland heath	10,487

Working together

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 a lot further back than the current position. The continuation of this approach is essential if the 2010 target is to be achieved.

Of all the partners that English Nature works with in Yorkshire and the Humber, 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.

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.

Figure 9 Major landowners and the condition of their SSSIs in Yorkshire and the Humber at the end of 2005

Organisation	Total area (ha)	Area of SSSI in target condition (ha)	Area of SSSI in target condition (%)
Ports and Harbours Authorities	27,888	27,357	98%
Water Companies	11,458	1,922	17%
Crown Estate (Marine)	7,140	7,014	98%
National Trust	3,730	2,416	65%
MoD	3,202	2,595	81%
English Nature	2,882	2,686	93%
Wildlife Trusts	2,432	2,091	86%
RSPB	1,500	1,265	84%
National Parks	1,350	1,342	99%
Forest Enterprise	1,103	1,018	92%



Muker Meadows SSSI, North Yorkshire. Peter Wakely/English Nature 15,586

The table shows the areas of land owned by each body. It does not necessarily reflect who is responsible for an 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.



Cowside Beck Valley, Malham-Arncliffe SSSI, North Yorkshire. Paul Glendell/English Nature 24,125

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, many species, rare or otherwise, are conserved. Secondly, SSSIs perform many important 'ecosystem services' – upland moorlands that cleanse 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. It is clear that the biggest challenge ahead is to ensure that there is a continuing partnership approach, with truly co-ordinated action by key stakeholders. Nationally, English Nature firmly believes that the 2010 target is both realistic and achievable. However this is only possible if everyone co-operates and

adequate resources are dedicated to addressing the outstanding issues.

The responsibility for overseeing this process passes from English Nature to *Natural England* later this year. The creation of the new organisation, *Natural England*, has already begun, with English Nature, the Landscape, Access and Recreation elements of the Countryside Agency, and the

environment activities of the 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 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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