

# CHAPTER 10—SUSTAINABLE DEVELOPMENT

ALI GLAISHER, PRINCIPAL ECOLOGIST AND KEVIN GLAZE, GROUP MANAGER—WASTE MANAGEMENT

## Included in this section

- Biodiversity in Staffordshire - current status and trends
- Biodiversity protection and enhancement in Staffordshire
- Zero Waste to Landfill Strategy

## Further reading

- The Uk Biodiversity Action Plan <http://www.ukbap.org.uk>
- The West Midlands Biodiversity Strategy <http://www.wmbp.org/>
- The Staffordshire Biodiversity Action Plan <http://www.sbap.org.uk/>
- Waste Strategy 2007 (DEFRA document); Staffordshire and Stoke Municipal Waste Management Strategy- Zero Waste to Landfill by 2020

## Key Findings

- Over 80% of Staffordshire's nationally important sites (Sites of Special Scientific Interest—SSSIs) are in favourable or recovering condition. SSSIs make up only 4.2% of the county, meaning local wildlife sites are crucial for the maintenance of biodiversity.
- Just under a third of the habitats found in local Wildlife Sites (Sites of Biological Importance) were damaged or destroyed between 1979 and 2000.
- Currently just under a quarter of local sites are in positive management. The aim is to increase this by 5% per year over the next three years.
- Staffordshire County continue to increase the amount of material recycled and composted and the percentage of Staffordshire's household waste sent to landfill continues to reduce. Waste minimisation, reuse, recycling and composting schemes continue to be developed and operated with partners.
- A 'Residual Waste Treatment Facility and associated transfer stations to help in reaching the waste strategy target of zero waste to landfill by 2020 are being developed
- The WRAP Behavioural Change Fund programme has significantly improved waste minimisation, reuse, recycling and composting tonnages

## 10.1 Biodiversity in Staffordshire – current status and trends

Staffordshire's position in the centre of the country means that a unique feature of the county's biodiversity is its wide range and variety, forming a transition between upland and lowland. The county's heathlands, particularly those on Cannock Chase, are nationally significant as are some of the ancient woodlands such as those in the Churnet Valley. There are 13 sites of international importance in the county, 65 Sites of Special Scientific Interest and 844 Sites of Biological Importance, of County significance. As well as important habitats, these designated sites support rare and endangered species such as nightjars, adders, dormice, and wild daffodils.

Protected sites represent isolated fragments of habitats that were once more widespread. For example, nationwide over 97% of species-rich grasslands have been lost in the last half century. This means conserving their habitat quality is essential for maintenance of biodiversity. The wider countryside is also important for a network of habitat features such as small woods, hedgerow networks, field margins and ponds and supports a range of threatened and declining species such as farmland birds, bats, butterflies and moths. The Staffordshire Biodiversity Action Plan identifies the county's important habitats and species and sets out targets for their conservation and enhancement.

Virtually all of the wildlife habitats in the UK have developed along with people. Without the right management the quality of these habitats declines and with it their ability to support the rarer of our species. Since 2000 there has been a statutory requirement for SSSI owners to maintain these sites in favourable condition and their quality is improving. Natural England monitors SSSIs for the Government. Table 10.1 (below) shows that the majority of SSSI area is in favourable or recovering condition – i.e. suitable management is in place.

**Table 10.1— Sites of Special Scientific Interest (SSSI) Condition in Staffordshire<sup>1</sup>**

condition of area	%
favourable	38.18
unfavourable - recovering	43.58
unfavourable - no change	14.42
unfavourable - declining	2.97
destroyed/part destroyed	0.85
<b>total</b>	<b>100</b>

} 81.76 per cent of area is meeting the PSA target

Source: Natural England, June 2008

SSSIs cover a mere 4.2% of the county. This means local wildlife sites are essential for the maintenance of biodiversity and meeting UK Biodiversity Action Plan targets. Staffordshire’s local sites, Sites of Biological Importance, do not have statutory protection. Planning Policy Statement 9 Biodiversity and Geological Conservation recognises their essential role in maintaining biodiversity and requires Development Plans to include policies for their protection. They are not, however, protected from the effects of land-use or management outside the planning system. A monitoring report prepared by Staffordshire Wildlife Trust in 2002 examined the changes between 1979 and 2000. This showed that just under a third (30%) of SBI habitat was either destroyed (9%) or lowered in value (21%) in two decades, equating to 202 sites. The remaining 70% (508 sites) were unchanged. Neglect or agricultural change were the most common reasons for loss of value. Putting in place suitable management for these sites is therefore a priority. As most SBIs are in private ownership, support of the SBI Partnership, which works with farmers and landowners to get management schemes in place, is essential if the targets for NI 197 are to be met. Currently around a quarter (24.8%) of SBIs are in positive management and the aim is to increase this by 5% per year over the next three years.

<sup>1</sup> Definitions (Natural England):

PSA target. The Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010. If a SSSI unit is currently assessed as being in favourable or unfavourable recovering condition, it is described as 'meeting the PSA target'.

Favourable condition means that the SSSI land is being adequately conserved and is meeting its 'conservation objectives', however, there is scope for the enhancement of these sites.

Unfavourable recovering condition is often known simply as 'recovering'. SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time.

In many cases, restoration takes time. Woodland that has been neglected for 50 years will take several years to bring back into a working coppice cycle. A drained peat bog might need 15-20 years to restore a reasonable coverage of sphagnum.

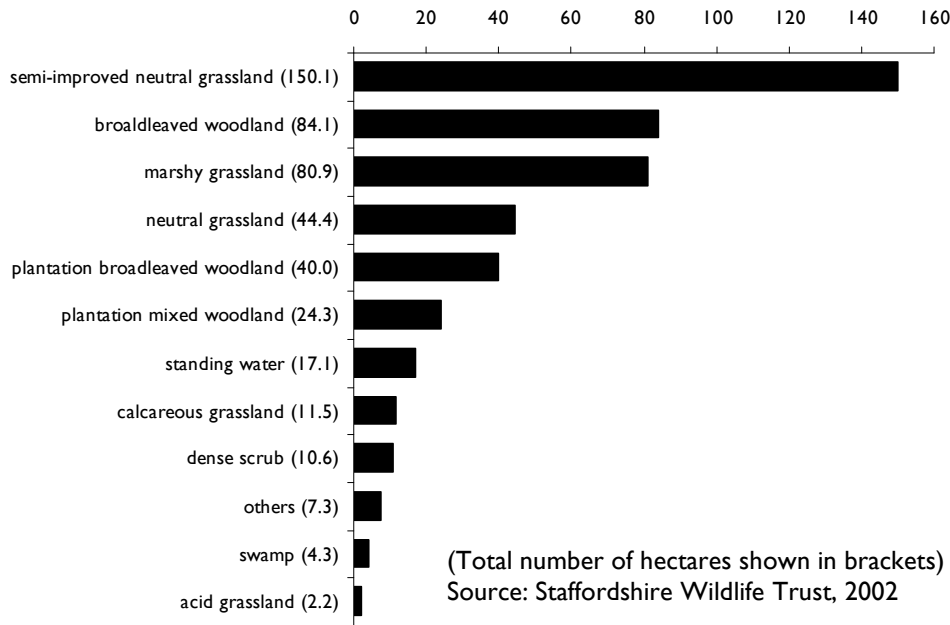
Unfavourable no change means the special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI unit remains in this poor condition, the more difficult it will be, in general, to achieve recovery.

Unfavourable declining means that the special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to site management or external pressures. The site condition is becoming progressively worse.

Destroyed means that lasting damage has occurred to all the special conservation interest of the SSSI unit such that it has been irretrievably lost. This land will never recover.

Part destroyed means that lasting damage has occurred to part of the special conservation interest of a SSSI unit such that it has been irretrievably lost and will never recover. Conservation work may be needed on the residual interest of the land.

**Figure 10.1—Recorded habitat losses from re-surveyed Grade I Sites of Biological Importance (SBIs) 1979-2000**



## 10.2 Biodiversity protection and enhancement in Staffordshire

The Staffordshire Biodiversity Action Plan Partnership works across the county to maintain, restore and recreate habitats and protect and enhance species populations both within and outside SBIs. Those involved include the local authorities, the Wildlife Trust, Natural England, the Environment Agency, the RSPB, the Forestry Commission, species groups such as Butterfly Conservation, Staffordshire Bat Group and the West Midlands Bird Club, local groups e.g. Chasewater Wildlife Group, and individuals such as wildlife surveyors and recorders and volunteer site managers. Large area initiatives focus on priority areas for biodiversity enhancement such as Cannock Chase-Sutton Park, the Trent, Sow and Penk river valleys and north-east Staffordshire grasslands and heathlands. Priorities are to reduce the isolation and fragmentation of habitats by creating connecting and stepping-stone habitats and encouraging sympathetic management in the wider countryside.

## 10.3 Zero waste to landfill

### *Views of residents*

In summer 2007 every resident in Staffordshire was given the opportunity to comment on the Zero Waste to Landfill by 2020 Strategy. This consultation involved asking the public what they thought about proposals to:

- reduce the amount of households waste produced
- increase recycling and composting rates to at least 50%
- use more residual waste to generate electricity
- how the strategy might be delivered.

The main findings of this consultation were as follows:

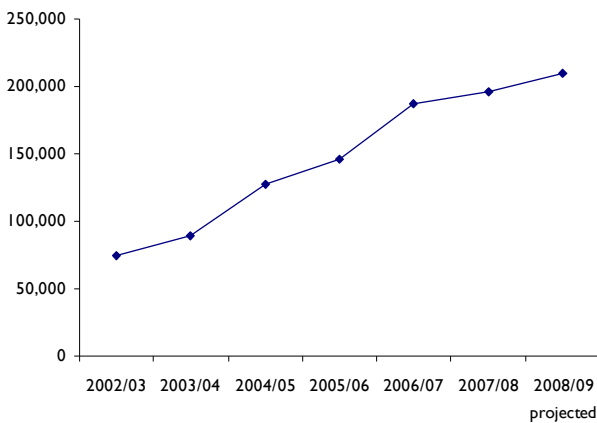
- The majority (94.6%) of respondents agreed that compared to where we are now the councils in Staffordshire must work more with local people to reduce the amount of waste we produce
- The majority (93.9%) of respondents agreed that the councils should plan and work so that at least half of their household waste is recycled and composted

- The majority (94.9%) of respondents recognised they had responsibilities to recycle and compost more of their waste
- Around four-in-five respondents (81.5%) agreed that Staffordshire should plan to stop using landfill sites because of environmental reasons
- Around four-in-five respondents (81.5%) of agreed that Staffordshire should plan to stop using landfill sites because disposing of waste in this way will become more expensive
- More than nine-in-ten respondents (92.9%) agreed with the proposition that Staffordshire should convert more residual rubbish into energy.

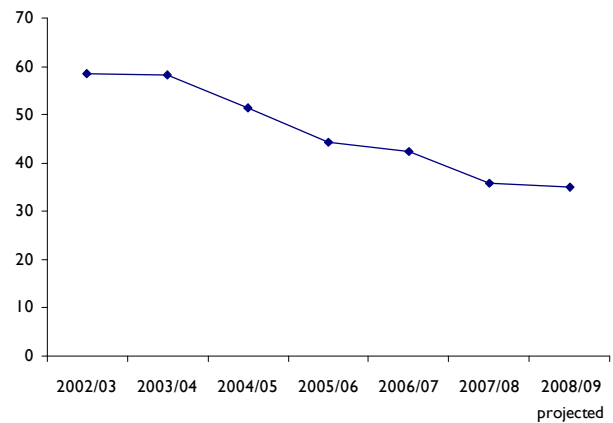
*Local Performance*

The outcomes of this consultation, and the greater profile given to the need to recycle more, and landfill less waste are highlighted by the positive performance locally over the past seven years. The total amounts of waste recycled and composted is projected to nearly treble between 2002/03 and 2008/09, while the proportion of waste landfilled has decreased from 58.6% to 35.0% over the same period (see Figures 10.2 and 10.3, below).

**Figure 10.2—Tonnes recycled and composted 2002-2009**



**Figure 10.3—Percentage Waste to landfill 2002-2009**



These figures are set against the context of the Government’s national indicator NI 191 which seeks to reduce the amount of residual household waste per household from a baseline of 1096kg per household at 2000/01 to 735 kg per household by 2010/11.

A key development in striving towards zero waste to landfill by 2020 is the development of the Waste to Resource (W2R) project. Alongside reduced waste overall and projected greater levels of recycling, the W2R when completed will handle over 300,000 tonnes of residual waste from Staffordshire, Warwickshire and Walsall.

In addition to the environmental benefits accrued by reduced levels of landfill, the W2R project will use a thermal energy recovery solution to provide a combined heat and power resource equivalent to around 18 megawatts of power, sufficient to power around 20,000 homes.

### *Summary*

Staffordshire continues to improve its waste management infrastructure, provide better recycling and composting facilities and meet its targets. The result of these measures has a significant impact on reducing greenhouse gases.

The UK currently produces 30 million tonnes of municipal waste every year – 75% which is landfilled. Municipal waste includes all waste under the control of local authorities, and around 60% of the municipal waste stream is biodegradable.

Biodegradable waste is mostly food waste, garden waste and paper, and this decays anaerobically in landfill sites to produce methane, a greenhouse gas 23 times more climate-changing than the emission of carbon dioxide from the use of fossil fuels. For this reason, reducing the amount of waste we put in landfill sites is vital.

There are many other problems associated with landfill including leaching (the leaking of potentially toxic liquids into soil and groundwater, litter and pests.

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## **Implications for service delivery**

- The Natural Environment & Rural Communities Act 2006 s.40 gives all public bodies a duty to take account of the conservation of biodiversity in all their activities and decision making
  - Local authorities have a key role in achieving Biodiversity Action Plan targets
  - The planning system, with guidance from the biodiversity sector, can and should deliver protection and enhancement of designated sites and priority habitats and species and creation of new habitats
  - Management of public land delivers benefits for biodiversity and public access to the natural environment
  - Despite Government and local policies, important habitats and species are still declining, though some are making a recovery. We need to act in partnership to address these issues
  - The effects of climate change on the county's biodiversity need to be addressed by enhancing habitat connectivity and quality to improve ecological resilience
  - Protecting and increasing natural habitats can help mitigate climate change; habitats such as woodlands and peat bogs act as carbon stores. Natural habitats can play an important role in flood alleviation, slowing water run-off and providing flood storage e.g. water meadows
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## **Government Priorities: Biodiversity**

The Natural Environment & Rural Communities Act 2006 s.40 requires all public authorities to take account of the conservation of biodiversity in the exercise of their functions.

Under the Countdown 2010 initiative, the UK and other European governments have made a commitment to halt biodiversity loss by 2010.

PSA28 Secure a healthy natural environment for today and the future –biodiversity valued, safeguarded and enhanced.

Defra PSA target 3 (ii): Care for our natural heritage, make the countryside attractive and enjoyable for all and preserve biological diversity by...bringing into favourable condition by 2010 95% of all nationally important wildlife sites.

Planning Policy Statement 9 Biodiversity and Geological Conservation states:

“Sites of regional and local biodiversity and geological interest.....have a fundamental role to play in meeting overall biodiversity targets; contributing to the quality of life and well-being of the community; and in supporting research and education.”

## **Government Priorities: Waste**

The Government has set out its vision for sustainable waste management in *Waste Strategy for England 2007 (May 2007)*. The Government’s key objectives are to:

- decouple waste growth (in all sectors) from economic growth and put more emphasis on waste prevention and re-use
- meet and exceed the Landfill Directive diversion targets for biodegradable municipal waste in 2010, 2013 and 2020
- increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste
- secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste
- get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.

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## **Indicators in the Staffordshire LAA relevant to this area**

- NI 197: Improved local biodiversity – proportion of local sites where positive conservation management has been or is being implemented
  - NI 191: Residual household waste per household
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