

Spotlight on SSSIs

Working towards the goals of Biodiversity 2020

Issue 8 – June 2016

It is with great pleasure that I bring you the eighth issue of 'Spotlight', the newsletter highlighting the achievements of farmers and other land managers in improving the condition of SSSIs.

I'd like to start by telling you the great news that there has been a significant increase in the total area of sites that have improved to favourable condition; 12,000 hectares to be precise. It's the most substantial increase in several years and is testament to SSSI owners and our partners' hard work and determination to improve these hugely important sites. Read more below about the sites that have reached favourable condition.

In this issue we hear from Murray Davidson, Environment and Nature Resources Manager at Hastings Borough Council. He tells us about Hastings Country Park Nature Reserve and the wonderful work that has been going on there to improve its condition. As you can see from the stunning cover image above taken at the site, their hard work and excellent management techniques are really paying off.

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Also in this issue we hear the fascinating story of Gilbert's Pit, one of London's most important geological SSSIs. The disused quarry in the Charlton area of south London opens a window on what this area would have looked like about 58 million years ago. Through funding and positive partnership working, the area was cleared of scrub and a stepped platform has been constructed giving uninterrupted views of this wonderful site. Dr Jonathan Larwood, Natural England's Senior Geologist tells us more below.

Meanwhile in Lincolnshire we hear from Georgina Wallis, Catchment Sensitive Farming Officer, Nene & Welland CSF Catchment Partnership, who tells us about the <u>Revital-ISE project</u> that was launched with the aim of improving biodiversity along the river and its surrounding habitats.

We also delve into the detail of one of our 'Star Sites' Woolmer Forest in Hampshire. Star Sites are examples of SSSIs, big and small, that are either vital for reaching our Biodiversity 2020 target of 50% of sites in favourable condition, or help us achieve more long term goals for ecological restoration. Woolmer Forest supports an impressive array of flora and fauna including a critically endangered beetle that is found exclusively at this site.

Finally, it would be remiss of me not to at least mention the referendum. The result came in as we were going to press. There will be a period of uncertainty as we work to understand the implications, meanwhile our work to improve the condition of our special sites continues.

I hope you enjoy this issue.



Rob Cooke Director, Terrestrial Biodiversity

Hastings Country Park Nature Reserve

Murray Davidson, Environment and Nature Resources Manager, Hastings Borough Council.

Hastings Country Park Nature Reserve, owned and managed by Hastings Borough Council, is one of the foremost coastal nature reserves in the UK. It encompasses a Country Park, a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC).

The 345 ha reserve is situated on the south-east coast of the UK and boasts spectacular scenery, eroding maritime cliff and slope, coastal grassland and heather, ancient woodlands and a sustainably managed farm, all within the High Weald Area of Outstanding Natural Beauty.



Coastal grassland and heather

The story so far

Until 2000, The Country Park had no management plan. An adjacent commercial dairy farm was polluting the SSSI, species and habitats of UK importance were in decline, and there was no investment and little recognition of the area as an asset to the town. Bracken, gorse and scrub had become endemic, threatening (and in many areas obliterating) coastal acid grassland and heathland habitats.

It was clear this could not continue. The council, with Natural England as a key partner, set out to develop a long-term strategy and rescue package. We terminated the farm tenancy and set out a vision to integrate the farm, Country Park and adjacent SSSI and SAC as one integrated, sustainable management unit, prioritising biodiversity and public enjoyment.

Case Study

Essential to this was the establishment of an annual council revenue budget and an elected member steering group to oversee the restoration project. Dilapidated farm buildings were renovated, and in 2004 a 10-year Countryside Stewardship legal agreement was awarded.

The importance of Stewardship grants

Our Countryside Stewardship Agreement provided the structure to manage the farmland and Country Park more sustainably; to prioritise management for farmland birds, introduce conservation grazing, protect and restore important habitats, and allow wildlife to thrive. In 2006, we combined the farmland, country park, SSSI and SAC under one designation: a Local Nature Reserve. This allowed us to create the town's largest area of sustainably managed natural green space, and manage the entire site as an integrated landscape.

We extended conservation grazing into the SSSI and SAC and employed cut-and-collect techniques on accessible areas of bracken and gorse. In some places we mechanically scraped the deep gorse and bracken litter layers back to the sandstone, to help regenerate a nascent seedbank.

In 2013, Natural England moved the council to a new 10-year Higher Level Stewardship (HLS) Agreement, one year earlier than anticipated. The HLS agreement sets the bar even higher for managing and restoring habitats, and this is reflected in our new management plan.

Free-roaming conservation grazing

We currently have a small herd of Exmoor ponies and a new herd of Belted Galloway cattle to manage glens and slopes in the SSSI and SAC,



Mechanically scraping deep gorse and bracken litter layers



Exmoor ponies are used to manage the glens and slopes

which are otherwise inaccessible to mechanical management. We have opened up fencing so the cattle and ponies can roam freely around one of our largest and wildest glens, allowing them the same freedom as walkers.

Visitors have enjoyed connecting with these charismatic animals, and they have been extremely successful in managing the reserve sustainably. Large areas were awash with bluebells in spring, and now with red campion, bedstraw, sheep's sorrel and foxgloves. The open areas are also alive with invertebrates.

What have we learnt?

The management of the reserve has been a journey in innovation and risk-taking, being clear on our biodiversity objectives, communicating our message, having the support of councillors, and taking people with us.

We have successfully combined biodiversity and wildlife with accessible natural green space for the benefit of the local community – with Hastings Country Park Local Nature Reserve winning Green Flag status every year since 2006. However, we recognise there is no end to management and habitat restoration, and our continuing challenge is how to retain success and commitment with ever-reducing resources.

None of this would have been possible without the dedication of our rangers, conservation volunteers, the Friends of Hastings Country Park, the support of elected members and the commitment of our local Natural England office, and Janet Whitman in particular.

Achieving the Biodiversity 2020 goals - report on progress

Jonathan Pearce, Biodiversity 2020 Co-ordinator, Natural England

SSSI condition: one small step....

Progress in improving the condition of Sites of Special Scientific Interest (SSSIs) has been significant over the past year, with a further 12,000 hectares being assessed in favourable condition. The increase puts the total area of sites in favourable condition at 38.5%, a move of 1% from a year before.

"This is the most significant step forward we have had in SSSI condition for several years," said Wanda Fojt, Protected Sites Programme Manager. "Years of hard work on site management and detailed condition surveys have revealed that from Salisbury Plain to Teesdale Allotments and from the Black Mountains to Rutland Water habitats and species are flourishing once again. Just as importantly, this improvement shows that we are making good progress towards the Biodiversity 2020 goal of having half of all sites in favourable condition".

Last year was the first time that Natural England based its SSSI delivery plans on Area Teams' own forecasts of how sites are doing rather than on theoretical modelling. This helped to achieve close to 90% of the anticipated improvement in sites.

Restoring England's ecological network - our goal for SSSIs

Our aim is that at least half of all SSSIs are in favourable condition by 2020 – and that most of the rest are in recovering condition. This is the Biodiversity 2020 goal – a milestone in securing the ongoing recovery of England's ecological network.



Each block on this chart represents 100 km^2 – an area roughly the size of Bristol. We need to restore 13 times this area to reach the Biodiversity 2020 goal of 50% of SSSIs in favourable condition.

Key SSSIs that have improved to favourable condition since April 2015

SSSI	Area improved	Key feature
Salisbury Plain, Wiltshire	5400 hectares	chalk grassland
Rutland Water, Rutland	1400 hectares	wintering birds
Teesdale Allotments, County Durham	846 hectares	breeding birds
North Exmoor, Devon/Somerset	755 hectares	blanket bog
Black Mountains, Herefordshire	455 hectares	blanket bog/upland heath
Kielder Mires, Cumbria/Northumberland	437 hectares	raised bog/blanket bog
The New Forest, Hampshire	282 hectares	lowland heath/ancient woodland
Goonhilly Downs, Cornwall	220 hectares	lowland heath
Povington and Grange Heaths, Dorset	236 hectares	lowland heath
Thursley – Hankley and Frensham Commons, Surrey	206 hectares	lowland heath
Derwent Ings, North Yorkshire	115 hectares	lowland grassland, breeding birds

And not forgetting the smallest area of improvement: At Box Mine in Wiltshire 13 meters² of scrub was removed from an area known as 'Shaft to the Cathedral' allowing good access to the rest of the mine for greater horseshoe bats.



Redshank – a breeding bird



Chalk grassland



Greater horseshoe bats

SSSIs where there has been a decline in condition

Unfortunately there was also a decline from favourable condition on some sites over the past year, amounting to 3,200 hectares. This has occurred where management problems have been identified, or where the site objectives have been made clearer.

Stepping into the past at Gilbert's Pit SSSI

Dr Jonathan Larwood, Natural England Senior Geologist

Charlton in Greenwich, south London, isn't the first place you'd imagine experiencing a tropical world, but from May this year that is exactly what you can do. Conservation work completed at Gilbert's Pit has once more revealed London's past tropical seas and rainforest. Clearance of vegetation, removal of scree, and construction of stepped viewing platforms provided unprecedented access to the former quarry faces of Gilbert's Pit, one of London's most important geological Sites of Special Scientific Interest (SSSIs).

How was it done?

Improvements to physical and visual access on the eastern and southern faces of Gilbert's Pit have been made possible through Natural England's Conservation and Enhancement Scheme (CES) and positive partnership working.

Following clearance of scree, scrub and trees a set of steps with a viewing platform were installed by Complete Ecology on behalf of the Royal Borough of Greenwich, who have contributed to the cost and overseen the project, carrying out tree and scrub clearance and supervised volunteer working parties. The London Geodiversity Partnership who have provided considerable volunteer time have also advised on which sections to improve and helped scope a report for a geotechnical survey by Capita Symonds.

What makes it so special?

The disused Gilbert's Pit in the Charlton area of south London, exposes sediments laid down in a coastal environment about 58 million years ago. These sediments include rounded pebbles that once formed a beach as well as abundant fossil sea shells and even fossil leaves washed in from nearby rainforest. Gilbert's Pit is regularly visited by geologists and is also an essential training ground for engineers. It provides them with a rare opportunity to encounter and understand the complex sediments which underlie much of London and can present significant challenges in major infrastructure projects such as Crossrail.

Jonathan said: "Gilbert's Pit is one of the few places in London where fossils can be seen in their natural position and this is made all the easier with the new stepped access and clearance work. How better to bring past worlds to life than the unexpected discovery of the seaside in the heart of London? Gilbert's Pit has long been famous amongst geologists, now everyone can see why!"

Favourable condition

By improving access and re-exposing sections, the work undertaken at Gilbert's Pit has brought the SSSI into favourable condition.

Julie Russ, Land Management Adviser in the Thames Valley Area Team said: "Gilbert's Pit is an incredible geological SSSI opening a door into our past. I'm really pleased that we've been able to open up the site for research and study, offering safe access which has also put the SSSI into favourable condition. The Conservation and Enhancement



Gilbert's Pit, 18 May 2016. Access steps opened with Greenwich Borough Councillor John Fahy and representatives from the London Geodiversity Partnership



Gilbert's Pit SSSI, steep eastern face prior to Conservation and Enhancement Scheme works



Fossils from the Woolwich Shell Bed, Gilbert's Pit SSSI

Scheme is also providing funds for the on-going clearance of scrub re-growth to ensure that the sediments remain visible, so it should remain in good condition for some time to come!"

For more information: Contact <u>Julie Russ</u>, or <u>Jonathan Larwood</u>.

More information about the London Geodiversity Partnership and London's geology can be found at: http://www.londongeopartnership.org.uk/

Visiting the site:

Access to Gilbert's Pit steps is by arrangement with the Royal Borough of Greenwich. Groups or individuals requiring access should contact Larry Blake (Senior Parks Ranger) either by email at <u>larry.blake@royalgreenwich.gov.uk</u> or by telephone on 020 8921 4124.

Partnership working in the rivers Nene and Welland

Georgina Wallis, Catchment Sensitive Farming Officer, Nene & Welland CSF Catchment Partnership

The Nene catchment is rich in historic and natural character, with historic parkland, ridge and furrow and open field patterns. Along the river are flooded gravel pits and their associated wetland habitats. The river itself is the tenth longest in the UK, flows north-east and is navigable for 88 miles from Northampton to the Wash.

The upper Welland catchment is mixed farmland, with mature trees and large hedgerows. There are standing willows along the valley and small remnant areas of wetlands and ponds. The river rises in the Hothorpe Hills in Northamptonshire, is roughly 65 miles long, and flows to the Wash. The Catchment Sensitive Farming (CSF) focus is upstream of Stamford, Lincolnshire.

Both catchments are rich with SSSI sites, including Pitsford Reservoir and Salcey Forest, whilst Achurch Meadows is one of the most important meadow SSSIs in the midlands. The Nene catchment boasts internationally significant numbers of overwintering birds. The particular focus of CSF is the Ise and Meadows SSSI.

CSF Catchment Partnership

The Nene and Welland catchment partnership includes the Environment Agency, Natural England, Welland Rivers Trust, The Wildlife Trust, Anglian Water and The River Nene Regional Park. The partnership champions CSF in these catchments, delivering advice, events, newsletters and information to farmers on locally important factors such as phosphate, sediment and pesticide levels in water, in order to reduce the risks of diffuse water pollution from agriculture. Farmers continue to engage and implement advice given to them through the project. This year, a number of events are planned, for example pesticide handling, soil management and grassland management including the use of sewage sludge and digestate.

Is it working?

Improving the quality of any SSSI site takes time, but the major step to ensure farmers understand the sources of agricultural diffuse pollution has been undertaken and this message is continually being spread. Gradual changes to farming practices and infrastructure will see SSSI sites across the catchments continue to improve, leading to better overall water quality and water courses to aid aquatic life and safeguard the environment for future generations.

Some farmers along the Ise have expiring ELS agreements and are coming into the new Countryside Stewardship Scheme, undertaking water capital grants and attending local events.

Welland catchment

SSSI's in the Welland include Eyebrook Reservoir, Seaton Meadows and Rutland Water, a major drinking water supply and recreational area. Owston Woods and Laune Big Wood are ancient oak and ash woodlands that are of national nature conservation significance and mark the remnants of the medieval royal hunting area of Leighfield forest (SSSI); they also represent one of the highest concentrations of ancient woodlands in the Midlands.

The upper Welland catchment has detailed geodiversity with exposures at former ironstone and building stone quarries. Tilton railway cutting SSSI is a good example of this.



The River Nene



The River Ise - the largest tributary of the River Nene

A focus on the Ise & Meadows - why is it special?

The River Ise is the largest tributary of the River Nene in Northamptonshire and is one of the best examples in the county of a lowland river on clay. It joins the River Nene at Wellingborough.

In the upper reaches the river retains typical natural features such as meanders, riffles and pools. The 4.7km reach east of Barford Bridge is the only section of river in Northamptonshire to be designated a SSSI and has a range of semi-natural features which are growing increasingly uncommon in areas of intensive agriculture. Woodland and semi-improved grassland along the main banks, together with an area of species-rich flood meadow, provide additional habitats which complement the interest of the site.

In the western section of the river, aquatic plant growth is more diverse, including species such as common club-rush, broadleaved pondweed, greater pond sedge and rigid hornwort, the latter is uncommon in Northamptonshire. Birds like reed bunting, sedge warbler, marsh tit, kingfisher and whitethroat are common along the river. There are notably high numbers of beetle species, caddis-fly and mayfly larvae, and a small self-supporting population of grayling, the only example in Northamptonshire.

The condition of the Ise and Meadows was a concern for local organisations and the community, so in 2008, the <u>Revital-ISE project</u> was launched with the aim of improving biodiversity along the river and its surrounding habitats.

The plan was to create new habitats, restore degraded habitats, instigate appropriate management for habitats, provide advice to landowners and land managers and to create opportunities for educational activities, research, and species and habitat monitoring. The main work has now been completed, however CSF is still engaging with local farmers.



Star Sites

Within Natural England we wanted to highlight the importance of SSSIs. Star Sites are examples of SSSIs, big and small, that are either vital for reaching our Biodiversity 2020 target of 50% of sites in favourable condition, or help us achieve more long term goals for ecological restoration. We thought we'd share them with you in future issues of the Spotlight. Here's the first:

Woolmer Forest, Hampshire

Woolmer Forest comprises the largest and most diverse areas of lowland heathland habitat in Hampshire

outside of the New Forest. It retains its open character due to the long history of military use with the Longmoor Ranges, located over the majority of the SSSI.

The site is exceptional for amphibians and reptiles, supporting 12 out of 13 native species including smooth snake, sand lizard, great crested newt and natterjack toad.

Woolmer Forest supports nationally significant populations of nightjar, woodlark and Dartford warbler.

The site also supports an important and varied vegetation community of humid, wet and dry heaths and valley mires. The rich array of flora includes a number of nationally rare and uncommon plants such as tower mustard, mossy stonecrop and shepherd's cress. Also of importance are areas of



Sand lizard

distinctive wood pasture, wet woodland, a complex of ponds of varying sizes, and the richness of the invertebrate fauna.

This is the only UK site for the spangled water beetle, classified as critically endangered under International Union for Conservation of Nature threat criteria.

Woolmer Forest SSSI – Key facts

Area: 1297 hectares Area in favourable condition: 41 hectares Area in recovering condition: 1256 hectares Number of notified³ features: 21

Date: as of 1 December 2015

The site is managed under four Higher Level Stewardship (HLS) agreements established during 2008 to 2012. As a government agency the Ministry of Defence (MOD) is not able to receive agrienvironment funding, agreements are therefore administered on a third-party basis by the Hampshire and Isle of Wight Wildlife Trust Amphibian and Reptile Conservation and the National Trust.

The agreements cover an area of roughly 600 hectares of the 1300 hectare SSSI, and secure management of significantly important areas of habitat.

Important priorities for management are controlling scrub and grasses in the heathland and establishing and maintaining a varied structural mosaic through grazing or alternatively, cutting or mowing the heather sward.

Common gorse is also managed via cutting and removing or rotational coppicing, to control vigorous growth. Cleared areas create suitable nesting habitat for ground-nesting birds such as woodlark and nightjar and maintain crucial gaps in the vegetation, important for increasing the sites resilience to wildfires.

The amphibian and reptile species require careful management which includes maintaining areas of bare sand, aquatic habitats, patches of scrub and a varied heathland mosaic. Shallow, temporary pools are also carefully managed for the benefit of natterjack toad.

Species counts suggest that since management of the site was undertaken, twelve species recorded on site remain and three of the rarest species are increasing. The sand lizard, in particular, is benefitting from translocation of captive-bred individuals, boosting the existing population and allowing expansion of its range beyond the area recognised when notifying the SSSI.

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All parties delivering management on the ground have agreed a common goal of clearing small areas of forestry and removing young scrub to create open environments for the benefit of heath.

Grazers versus tanks ...

Key challenges at the site include changing levels of military use, recreational disturbance, invasive nonnative species, drainage modification and nearby urban development. Grazing with livestock can be difficult to arrange around live firing and military training manoeuvres. Likewise, access to the live firing range is highly restricted, therefore surveying these areas for overall condition and undertaking species counts can sometimes be difficult...

Although nearly 97% of the site is classed as unfavourable recovering, Woolmer Forest has potential to move to favourable habitat condition over the next five years. A number of units will be prioritised for Integrated Site Assessment in 2016/17. It is estimated that nearly 500 hectares has a high chance of turning favourable.

For the remaining area, there are a number of unknowns. For this reason, site-checks over the coming years will be vital for gathering data on the ground. In a number of instances present management simply needs maintaining for the next five years to ensure a move to favourable condition. Similarly, recent forestry clearance has a high chance of delivering favourable-condition habitat, but these areas need to be monitored to ensure that the desired vegetation communities take hold.

Interesting facts about the site:

- Woolmer is a former medieval hunting forest, traditionally managed, like other royal forests, as wood
 pasture in which deer would be kept for hunting by the aristocracy for sport and for venison, and
 where commoners were permitted to graze their livestock.
- The former sidings of the once-extensive Longmoor Military Railway are now ideal habitat for the natterjack toad.

We have a statutory duty to keep up-to-date contact details for our SSSI owners / occupiers. Please can we have the following details to ensure our records are correct:

- Your name
- Name of SSSI
- Postal Address
- Email Address you would like correspondence sent to

Please also let us know if you would like to receive future copies of the SSSI Annual Statement and newsletter. You can email us on <u>sssi@naturalengland.org.uk</u> or call 0845 600 3078

Photo credits

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