

Spotlight on SSSIs

Working towards the goals of Biodiversity 2020

Issue 6 – June 2015

It is with great pleasure that I bring you the sixth issue of 'Spotlight', the newsletter highlighting the achievements of farmers and other land managers in improving the condition of Sites of Special Scientific Interest (SSSIs).

This issue has a watery theme as we hear about how the Catchment Based Approach (CABA) has been used to bring partners together to create the Teme Catchment Partnership. The partnership has been formed to improve water quality and wildlife habitats in and around the river which runs through Shropshire and Worcestershire.

A bit further up the country in the River Mease catchment in Leicestershire, Coleorton Brook has been transformed through a partnership between Trent Rivers Trust, the National Forest Company, Natural England and local volunteer groups and local businesses. Read about the improvements that have already taken place through this collaborative approach.

'Tropical seas, fringed by reefs', it sounds like a lovely holiday destination doesn't it? However these are actually geological SSSIs in Sunderland that are gradually being uncovered through various partnerships and agreements. A disused quarry and road cutting are just two examples that have been cleared and the reef can now easily be seen.

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Sites of Special Scientific Interest cover a little over 1 million hectares or 8 per cent of England. They protect nature's jewels in the crown and form the core of our ecological network. When SSSIs are in good condition – described as 'favourable', biodiversity has a far stronger chance of thriving throughout the country.

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.

The past four years has seen steady progress in SSSI condition and during 2014 we made a detailed analysis of the likely recovery times for all sites. This showed that, with a good wind behind us, the 2020 goal can be achieved. For 2015-16 we are expecting to see significant improvement on a number of key sites. We go into further detail regarding these sites in the Report on Progress later on in the newsletter.

Ultimately, improvements on any SSSI will be dependent on the hard work and support of the many individuals and organisations that own or manage this unique network of natural sites. However, as this edition of Spotlight on SSSIs shows, there is a great deal to celebrate when we look at the wide range of benefits that sites are providing right now, and the great work that is taking place across the country. We hope you enjoy this issue.



Rob Cooke Director, Terrestrial Biodiversity

The River Teme SSSI

Mike Morris, Deputy Director Severn Rivers Trust

The River Teme is a rural river which passes through the market towns of Knighton, Ludlow and Tenbury Wells before joining the River Severn south of Worcester. The whole of the River Teme is classed as a Site of Special Scientific Interest and parts of the River Clun are classed as a Special Area of Conservation.

Brown trout and migratory Atlantic salmon are found throughout the majority of the Teme catchment and its tributaries provide extensive spawning grounds for both species. The presence of obstacles such as weirs limits the distribution of all fish species within the catchment.



Riparian management - before

Water quality in certain reaches of the catchment is affected by diffuse pollution, mainly by nutrients and sediment. Whilst there is adequate supply of surface water in the catchment during the winter months, in the summer the Teme often experiences low flows.

Building a partnership and engaging stakeholders

The Catchment Based Approach (CaBA) embeds collaborative working at a river catchment scale to deliver cross cutting improvements to our water environments. The Teme Catchment partnership was established through a series of stakeholder engagement meetings in 2012 to ascertain key areas of interest within the catchment; water quality, water quantity, biodiversity, wildlife and tourism.

The partnership is working to bring a wide range of partners together across the catchment to try to achieve the vision of 'Healthy functioning rivers flowing through a balanced living landscape, cherished by all in the Teme Catchment'.

The first meeting gave partners an opportunity to propose collaborative projects and discuss how they could be delivered. With over 20 partners in the partnership including statutory bodies, local authorities, wildlife trusts, river trusts, woodland trusts, water companies, local land owners, the partnership brings local knowledge and expertise together to drive cost-effective practical delivery on the ground, resulting in multiple benefits including improvements to water quality, enhanced biodiversity, reduced flood risk, resilience to climate change and greater community engagement with their local river.

In a stakeholder-led catchment planning process we work together to develop a common understanding of the current and future issues that relate to the environmental health of the catchment. We can also work to identify what needs to be done and where it should be delivered to create a healthy, functional ecosystem that deliver the optimal blend of benefits needed now and in the future.

This catchment partnership is being hosted by the <u>Severn Rivers Trust</u>.

Using data and evidence in catchment planning

A lot of work is already being done to try to improve water quality and wildlife habitats in and around the river.



River Teme – Dingham Fish Pass



Riparian management - after

A <u>Catchment Management plan</u> has been created by the partnership and involved a number of workshops asking local people what they felt were the problems affecting rivers and streams in the catchments and ways to solve these issues. The plan sets out what some of the issues are, what is already happening and what more could be done. This is just the start of a process to involve individuals, communities, organisations, companies, farmers and landowners in working together to improve our rivers.

Delivering catchment management interventions

Having developed a targeted and tailored plan, we now need to go and deliver catchment management interventions that will achieve the best possible environmental and economic benefits for all of the interested parties including land owners and farmers.

The Teme Catchment partnership are carrying out a number of projects including:

- Collating monitoring data and walkover surveys
- Habitat improvement work to benefit a wide variety of species
- Land management best practice that improves the farm economic model, water quality, soil management and other environmental services
- Fish pass projects to improve all-species access throughout the catchment

For more information about specific projects, please click <u>here</u> or for more information about how the partnership can assist you please contact admin@severnriverstrust.com

Achieving the Biodiversity 2020 goals - report on progress

By 2020, the Governments' objective is to see that 50 per cent of the total area of SSSIs is in a favourable condition, while at least 45 per cent of the remaining area of SSSIs are in a stage of recovery and can be expected to reach favourable condition, once management plans have taken effect.

Each block on this chart represents 100 km2 – an area roughly the size of Bristol. We need to restore 14 times this area to reach the Biodiversity 2020 goal of 50 per cent of SSSIs in favourable condition.



Progress at April 2015:

- 37.6% of SSSIs are in favourable condition

- 95.9% of SSSIs are in favourable or recovering condition

Key sites achieving favourable condition during 2014-15

Buttermere Fells, Cumbria (2 units): 432 hectares

This site is hugely popular with fell walkers, covering more than 3,000 hectares of upland heath, as well as areas of scree and mountain crags. An assessment in 2014 found that across two units these habitats displayed an appropriate range of biodiversity. It is considered that most of the remaining area of the site will take some years to achieve favourable condition.

Thursley, Hankley and Frensham Commons, Surrey (4 units): 213 hectares

This SSI comprises some of the finest areas of heathland and valley bog in southern England. The dry sandy heath provides what reptiles need for basking, egg laying and hibernation and as a result populations of sand lizards and smooth snake are on the up. Nightjars and Dartford warblers are also increasing in number. More than half of Thursley SSSI is now in favourable condition and it is expected that all of the site will be so by 2020.



Sand lizard



Smooth snake

Bredon Hill, Worcestershire (8 units): 309 hectares

Brendon is amongst the top five sites in the country for Saproxylic beetles - those that depend on decaying wood present in pasture woodlands. It is also home to the violet click beetle, a UK rarity and a European Protected Species.

Ashdown Forest, East Sussex (4 units): 179 hectares

Covering more than 3,000 hectares, Ashdown forest is one of the largest expanses of heath, woodland and valley bog in southern England. It is a key site for the rare and stunning butterfly, the silver studded blue. Currently a fifth of the site is in favourable condition and it is anticipated that the whole site will be favourable by 2020.

East Nidderdale Moors, North Yorkshire (1 unit): 140 hectares

This site is benefiting greatly from a Higher Level Stewardship agreement to manage grazing levels over extensive areas of upland heath and blanket bog. Although only a small proportion



Silver-studded blue

of the site is currently in favourable condition last year's assessment included an area of blanket bog which passed all indicators of diversity. The Moors are particularly import for populations of merlin.

And what went backwards....

Two significant areas of SSSI declined in condition last year:

Lovely Seat - Stainton Moor, North Yorkshire: (1 unit) 800 hectares

The heathland and bog habitats on this large unit did not display the diversity of species expected for such habitats.

Wast Water, Cumbria (1 unit): 287 hectares

The Lake is considered unfavourable due to low numbers of Charr, as well as the level of sediments and algal cover.

Revealing our tropical past

Dr. Jonathan Larwood, Natural England Senior Geologist

255 million years ago a shallow tropical sea, fringed by reefs, lapped the shores of northern England in a geological Period known as the Permian. Today, this is hard to believe but if you look more closely this past environment emerges.

Magnesian Limestone, which forms a prominent escarpment and spectacular coastal cliffs, represents the remnants of these Permian reefs. The rocks exposed along the coast, in quarries, and in road and rail cuttings provide views literally into the heart of this reef and onto the fossilised remains of the animals that once lived there. A number of these localities are geological SSSIs, conserved to tell the story of this small part of the geological evolution of England.

Natural England has been working with a number of landowners to re-expose several of these geological SSSIs which, over time, have become overgrown and obscured. Funded through Natural England's Conservation and Enhancement Scheme (CES), which supports both capital works and on-going management, sections from the centre to the edge of the reef are once more visible. Three SSSIs in Sunderland demonstrate the breadth of this work.

Humbledon Hill Quarry SSSI – this disused quarry now forms the backdrop to a group of gardens. The residents who own the gardens were keen for some tree and vegetation removal to take place as they were concerned about stability of the rockface, but they were daunted by the technicalities of commissioning the works themselves and managing the payments from Natural England.

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Here a CES agreement allowed roped access enabling the removal of vegetation and trees, and also reimbursed the residents for the cost of appointing an agent to act on their behalf. Their Natural England Adviser was able to help them define the role they wanted their agent to perform and supply a list of possible contacts. Once appointed, the agent drew up the work specification, arranged any necessary consents, commissioned and supervised the contractor, and even liaised with local geologists so that they could analyse material arising from the works. On completion of the agreed work the CES team organised payment to the agent on the production of the contractor's invoice. This took a lot of the stress out of the process for the residents and has



Fossil bryozoan from the reef

re-exposed one of the most fossiliferous localities in the reef, at the same time improving the stability of the rock face which had become an increasing concern for the owners.

Hylton Castle Cutting SSSI – a different challenge, this road cutting through the front edge of the reef had become obscured by trees and bushes. Working with the local authority, traffic controls were put in place allowing scrub to be cleared, both re-exposing the geology and improving the prospects for the Magnesian Limestone flora that had become increasingly shaded out.

Photo 1 Scrub removal and mulching, Photos 2 and 3 Before and after, reef edge re-exposed

Fullwell and Carley Hill Quarries SSSI – this has been the most spectacular transformation. These disused quarries expose one of the more enigmatic elements of the Magnesian Limestone – the Concretionary Limestone Formation including the aptly named 'cannon-ball' limestone. Working with the local authority, with Heritage Lottery Funded Limestone Landscapes Partnership match funding, a former quarry face obscured by woodland and dense vegetation has been cleared. For the first time in many years access is now possible to one of the most important exposures of Concretionary Magnesian Limestone in Europe.

Photo 4 and 5 Magnesian Limestone re-exposed at Fulwell and Carley Hill Quarries SSSI, before and after; Photo 6 Clearance underway; Photo 7 Detail of the re-exposed Cannon-ball Limestone

Eton College working to save endangered flower

NatureBureau

Cattle have recently begun grazing a SSSI at Eton College to help protect an endangered flower. It is one of a series of measures being undertaken to help the Pennyroyal (*Mentha pulegium*), which is categorised as endangered within the Vascular Plant Red Data List for Great Britain and is a priority species on the UK Biodiversity Action Plan.

Pennyroyal was once found throughout the UK on common land and village greens. It was often used as a preservative and an insect repellent. The flower has declined drastically in recent years because of changes in the management of greens and commons, including a reduction in traditional grazing practices.

Eton College has arranged for the grassland where Pennyroyal is found to be cleared of aggressive plants that compete with the rare flower. Staff have also arranged for a herd of special cattle to graze the grassland to aid the plant's recovery.

"Finding cattle to graze the site was challenging because of ongoing restrictions in cattle movement due to Bovine TB but we're pleased that Felicity Wise, a local grazier who has previously won awards at the Royal County of Berkshire Show will be bringing some of her Dexters to the site," said Ian Mellor, Director of Buildings and Facilities. "We are very keen to play our part in helping to protect and preserve the Pennyroyal."

Pennyroyal (Mentha pulegium)

The college has been supported in this work by Natural England's Higher Level Stewardship (HLS) programme.

Imogen Parker, Land Management and Conservation Adviser at Natural England said: "NatureBureau, a local ecology consultancy, who are managing the SSSI on behalf of Eton College, have worked with Natural England to improve its condition. The work has been guided by Entry Level Stewardship (ELS) and HLS agreements set up by Rebecca Hart in Natural England.

Pennyroyal colonisation is promoted by disturbance and NatureBureau organised for disturbance to be carried out using a tractor within part of the SSSI.

This work was undertaken to mimic the effect of cattle disturbance while the grazing agreement was being arranged and has resulted in more Pennyroyal plants being recorded in the SSSI this year".

The remaining Pennyroyal plants will be watched closely to ensure that the flower survives in Berkshire for many years to come.

Dexters graze the site

Site of Special Scientific Interest status for London parks is confirmed

Natural England has confirmed the designation of Bushy Park and Home Park in the London Borough of Richmond as a Site of Special Scientific Interest.

The **Bushy Park and Home Park SSSI** has been designated because of the exceptionally large numbers of ancient and veteran trees growing on the site; its internationally significant populations of rare insects; and the presence of extensive areas of special grassland habitat.

The trees at Bushy Park and Home Park are survivors of a wood-pasture management that dates back to the 15th Century. More than 200 veteran trees have been identified at the site of which 94 are classed as ancient. The site is one of

Chestnut Avenue

only 44 sites nationally known to support more than 100 veteran trees and is the highest ranking of ten comparable sites in the Greater London area.

The trees include oak and lime with some horse chestnut and sweet chestnut and around 16 other species of tree. A notable feature is the occurrence of a large number of very old hawthorn trees, many of which are festooned with mistletoe.

The great age of many of the trees also provides habitat for many rare species of wood feeding insects and the site ranks amongst the top five in Britain for this highly specialised group of creatures, for which Britain has international importance.

The majority of the 540ha site is held in trust by the Crown Estate. Bushy Park is managed by The Royal Parks and Home Park by Historic Royal Palaces who have both welcomed the SSSI designation.

Nicholas Mallory Garbutt, Tree and Wildlife Conservation Manager, Historic Royal Palaces, said, "We are delighted that Home Park has received this recognition of its national significance for wildlife conservation. This historic deer park is a vital part of Hampton Court Palace's history, which has been enjoyed by everyone from King Henry VIII, to the many visitors who flock to the Hampton Court Flower Show every year.

Stag beetle

"The results of recent wildlife surveys show that the historic trees and acid grassland of the park provide an important habitat for wildlife conservation, and we look forward to working with Natural England to continue to preserve this environment for future generations."

Ray Brodie, Manager of Bushy Park, Royal Parks, added: "This is a great accolade for Bushy Park and confirms what we have long-known to be true; that Bushy Park is one of the finest sites in England for wildlife and ecology. Bushy Park contains many rare and important species and habitats including rare stag beetles and around 10 different species of bat.

"The Royal Parks works hard to conserve and protect this unique environment, while also ensuring that Bushy Park is a peaceful haven for the many thousands of visitors who come each year to relax, unwind and enjoy the natural surroundings."

The confirmation of the SSSI designation came during <u>London Tree Week 2015</u> which ran from 23-31 May and celebrated London's trees and woodlands with a series of special activities.

River Restoration project at Ashby Business Park in the River Mease catchment

Robert Gornall, Catchment Sensitive Farming Officer, River Mease.

Winding its way south from Ashby de la Zouch and then west through Leicestershire, Derbyshire and Staffordshire to the River Trent, the River Mease and the lower section of the Gilwiskaw Brook are designated as the River Mease Site of Special Scientific Interest and Special Area of Conservation.

Covering around 25km (16 miles) the River Mease SSSI represents one of the best examples of an unspoilt meandering lowland clay river, which supports characteristic habitats and species, including significant populations of spined loach and bullhead.

Transformation due to collaboration

The Coleorton Brook, a once neglected and litterfilled tributary of the Mease flowing through Ashby Business Park has recently been transformed following a collaborative river improvement project. Natural England, Trent Rivers Trust and the National Forest Company teamed up to fund the project with support from local volunteer groups and local businesses, including Alstom, Ceva Logistics and Siemens.

Through working in partnership the project has helped:

- Improve biodiversity, water quality and access to the watercourse.
- Improve biodiversity and water quality in the River Mease SSSI/SAC condition status downstream in the catchment.
- Create attractive seating areas to allow the public and staff from the local business park to view the river.
- Improve links to the Right of Way network in Ashby.
- Raise awareness of the brook and opportunities for community engagement.

Trent Rivers Trust's Alan Graham who coordinated the work said "It's really good working with the local businesses who saw straight away the benefits for the environment and their employee's wellbeing. There is still more work to do but we have shown what can be achieved if we all pull together, which will lead to a brighter future for this and other neglected urban sites."

Volunteers from Ashby Business Park

A volunteer from Ceva Logistics helping in one of the working parties was very pleased to be able to contribute. He said it was "really good to get involved in supporting the upkeep/improvement of the local area. Too many of us (myself included) just drive into the area work and then leave for home without giving much notice to our surroundings and the treasures that are really just hidden in plain sight. It was nice to learn a few things about local wildlife and species in between the hard graft."

The Future

Further liaison is required with the owners of the business park and Ashby Town Council to agree a way forward to ensure this site is better managed in the future. Further funding has been applied for to continue to work on the site and downstream.

Longer term the hope is that local businesses and employees will take ownership of maintenance and further enhancement of the Brook.

Interpretation panel installed next to Coleorton Brook.

Natural England and the Forestry Commission joint guidance on ash dieback and SSSI condition

The core messages from this <u>new guidance</u> are the need to diversify our SSSI woodlands in the face of threats from pests and diseases through agreeing management strategies with SSSI woodland owners to increase species diversity particularly in those parts of the country where we have almost pure SSSI ash stands.

There is shared recognition that this may require the planting of trees that aren't currently present on these sites, but also to retain a proportion of ash, and to promote natural regeneration. There are also other important messages relating to how SSSI condition is determined in the face of tree pests and diseases, the guidance helpfully recognises that pest and disease needs to be formally acknowledged as a threat but this should not mean an SSSI being 'turned' unfavourable if the pest or disease is not yet present, if there is sufficient diversity of trees and shrubs.

This is a really important principle for woodland SSSI owners as there are implications for them if their woodland is not deemed to be in favourable condition.

For further information contact your Natural England Adviser.

Feedback and contact details

Lastly, we would welcome feedback from you, whether it is about this statement or the service you receive from us. We are constantly looking for ways to improve our service to you and hearing your thoughts is one of the best ways of finding out whether we are getting it right or not. Please send any feedback to <u>sssi@naturalengland.org.uk</u>

It is the responsibility of the SSSI owner or occupier to update Natural England of changes to contact details or sale, termination or transfer of tenancy.

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

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