



Spotlight on SSSIs

Working towards the goals of Biodiversity 2020

Issue 3 – December 2013

It is with great pleasure that I bring you the third issue of 'Spotlight', the newsletter highlighting the achievements of farmers and other land managers in improving the condition of SSSIs. In this issue we look at some of the great work taking place on SSSIs across the country and the improvements we, at Natural England, are making in our service to you.

Invasive Non-Native Species (INNS) are a growing problem throughout the world, having a major impact on wildlife, businesses such as agriculture, and on human health. Over 10,000 hectares of SSSI land in the UK is known to be affected by INNS: In this edition we look at what's being done about them, what you can do to help and explain the problems these species cause.

We also have an interview with Simon Bateman, a Site Manager from the Woodland Trust who tells us why he decided to work in conservation, what his working day is like and how he manages two of his sites.

Contents

[Olympic Legacy at Hadleigh Farm and Country Park](#)

[Achieving the Biodiversity 2020 goals - report on progress](#)

[Interview with a Woodland Trust site manager](#)

[The value of SSSIs](#)

[Invasive Non-Native Species and how to deal with them](#)

[Improving our service to you](#)



The London 2012 Olympics seem a distant memory now. What has happened to the sites that were host to the events and the thousands of people that attended them? The article on Hadleigh Farm and Country Park which was the venue for the mountain bike events, explains how careful planning and close partnership working have created a lasting legacy for the community whilst delivering improved environmental outcomes for the site.

In the last six months there has been a slight decline of 0.17% in the total area of sites in favourable condition, while the area in recovering condition has increased by 0.29%. Despite this decline it is encouraging to see a number of sites have improved to favourable condition over the past six months. We list the top five.

Clearly there is much to be done to achieve the ambitions for improvement in the SSSI series. 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. These achievements are due in no small amount to the strong partnerships that exist between Natural England and the organisations and individuals that own or manage the 4,128 SSSIs throughout the country.



A handwritten signature in black ink that reads "Maddy Jago".

Maddy Jago,
Director, Landscape and Biodiversity

Olympic legacy at Hadleigh Farm and Country park

Last year the London Organising Committee of the Olympic Games (LOCOG) selected Hadleigh Farm and Country Park as the mountain biking venue for the London 2012 Olympic Games.

Located in southern Essex - Hadleigh Farm, owned by The Salvation Army and Essex County Council's Country Park is set on a steep scarp slope of downland. It contains Roman archaeological and World War Two features along with the ruins of Hadleigh Castle, built over 700 years ago and now managed by English Heritage.



The start/finish area, Hadleigh 2012

It is a mixed landscape of broadleaved woodland, neutral grassland and scattered scrub that leads down to grazing marsh, saltmarsh and the intertidal mudflats of Benfleet Creek. This mosaic of habitats has local, national and international significance for wildlife and most of the Country Park is notified as a SSSI for its plants, invertebrates, and overwintering waterfowl.

Over two days in August 2012, the area's dramatic sloping terrain hosted the world's leading mountain bike riders and around 40,000 spectators. Millions more tuned in to the action on television around the world. The 5km open course was a new concept for the Olympics, which has traditionally favoured more closed and forested landscapes.

The main challenge for the project was to integrate the various mountain biking courses and associated visitor facilities within a designated and ecologically rich landscape. This was addressed in part through a planning agreement with Essex County Council which sought to ensure that the short-term adverse impacts on the SSSI were repaired through a long-term management plan which would also deliver added conservation benefits.

In time, it is anticipated that broader environmental benefits will be gained through more sustainable grassland management. These include better soil nutrient retention, enhanced carbon sequestration, improved water quality and a broader pollination season and nectar supply for insects. Furthermore, the use of livestock for grazing will expand opportunities for local food production.

Natural England has worked with landowners to improve the condition of the SSSI downs habitat and environmental stewardship agreements have been established to deliver more effective management.

The Salvation Army land at Hadleigh Farm has been grazed for 13 years, and for the last ten has benefited from Countryside Stewardship Scheme prescriptions. Now a Higher Level Stewardship (HLS) Scheme has been established.



The Olympic mountain biking course

Within the Country Park, an HLS agreement has been set up with Essex County Council to deliver more focused and targeted management.

This HLS agreement will help bring the SSSI into favourable condition through a programme of scrub and grassland management. The agreement also includes grazing by Red Poll, a rare breed of cattle native to East Anglia and introduced through the Essex Grazing and Grasslands Project, and is being managed by a newly appointed Grazing Project Officer. The cattle, according to Essex County Council, have been well received by the general public.

Natural England has also supported the Salvation Army in a scheme to revert existing arable land to an ecologically diverse grassland landscape.

An HLS agreement for this started in July and is targeting the decline of farmland birds and invertebrates – in particular bumblebees. Options include expanding field margins to provide enhanced margins, pollen and nectar mixes and overwinter food. Important historic features are protected under grass.

Essex County Council has supported this proposal to improve the character and increase the quality of the natural environment across the wider landscape through the HLS agreement.



Red Poll cattle grazing

Achieving the Biodiversity 2020 goals - report on progress

The overall performance of the SSSI series is measured by the percentage of area assessed to be in favourable or recovering condition. The aim of the Government's conservation strategy, Biodiversity 2020, is that at least 50% of SSSIs should be in favourable condition by 2020, while the majority of other sites should be in recovering condition.

You might ask: "what does 'favourable' or 'recovering' condition actually mean for my field or patch of woodland?" Put simply, when a site is in 'favourable' condition all the features for which it was notified are being adequately conserved. To determine this, a Natural England Adviser who visits your site will have a detailed checklist setting out the requirements of each feature of interest. When a site is in 'recovering' condition it means that appropriate management measures are in place which should lead to the site reaching favourable condition in due course.

Over the past six months there have been only minor changes in the overall condition of SSSIs in England. The total area of sites in favourable condition has declined by 0.17% to 37.38%, while the area in recovering condition has increased by 0.29% to 58.84%.

Summary of shift in each condition category, April 2011 to present

Condition category	1 April 2011 %	1 April 2012 %	1 April 2013 %	1 October 2013 %	2020 Target %
Favourable	36.6	37.24	37.55	37.38	50
Unfavourable recovering	59.9	59.40	58.55	58.84	45
Unfavourable no change	2.3	2.20	2.20	2.18	(No target)
Unfavourable declining	1.1	1.20	1.67	1.57	(No target)
Destroyed/part destroyed	0.1	0.01	0.03	0.03	(No target)

The most significant gains are listed in the table below.

Recent major gains (April 2013 – October 2013)

Largest areas improved to Favourable Condition		
County	Area	Hectares improved
Norfolk	Upper Thurne Broads and Marshes	279
Buckinghamshire	Shabbington Woods Complex	235
Cornwall	Lower Fal and Helford Intertidal	175
Kent	Cobham Woods	156
Lancashire	Bowland Fells	1282
		Improved from unfavourable recovering condition

While the overall change in condition so far this year is slight, the significant point is that a much more rapid improvement in condition will be needed in the next few years if the aims of Biodiversity 2020 are to be met. The total area of SSSIs in England is slightly over 1 million hectares which means that a shift in condition of 1% requires an improvement over roughly 10,000 hectares of land. That means that more than 130,000 hectares (13%) need to improve to favourable condition by 2020.

Interview with a Woodland Trust site manager

Simon Bateman is a site manager for the Woodland Trust. Here he gives an insight into why he got into conservation, what his day to day job entails and a bit about two of the sites he manages.

How long have you worked for The Woodland Trust?

I've worked for The Woodland Trust for just over five years. It's an excellent organisation to work for, full of people who are really passionate about the work they do.

What made you want to get into conservation?

I grew up in rural Kent, surrounded by countryside and wildlife, and knew from a pretty early age that a nine to five office job just wasn't for me. I went to university at Coventry, studying Geography and did a one year work placement with the Macclesfield Borough Council Ranger Service. It was here that I realised a career in conservation was the direction I wanted to go in.

What does your job entail on a day to day basis?

I'm the Site Manager for 30 Woodland Trust sites, including seven SSSIs, that are spread from north-west Kent, through all of Surrey, South London, the northern half of Hampshire and into Wiltshire. I work from home, but spend a fair bit of time travelling around the sites. There's no such thing as a typical day, but I'm responsible for the overall management of the sites, which includes everything from reviewing the management plans and carrying out key feature and condition assessments to managing budgets for the sites, volunteer management and putting together and delivering funded projects.

Can you tell us a bit about Marden Park – one of the SSSIs you manage?

Marden Park is part of the Woldingham and Oxted Downs SSSI and is notified for its chalk downland and is in favourable condition. It has a mix of ancient and secondary woodland, with several areas of chalk grassland glades. The largest of these has been fenced and grazed with sheep and goats for many years, with occasional additional input from local volunteers to help keep the scrub levels down. The scrub on the chalk grassland was (and still is) quite thick in places. The site was in good condition when I took over and is in much the same condition now. There are a large number of beech pollards at Marden, spread throughout much of the site. They're a great addition to the site and act as fantastic features.



Beech trees at Marden Park

You also manage Binswood SSSI within the South Downs National Park?

Yes, Binswood is ancient woodland, managed as wood pasture and is 62 hectares in size. It is in unfavourable recovering condition. The central area of the site is quite dense woodland, with a large number of veteran trees dotted throughout. The surrounding area of the woodland is a mix of scrub and grassland. The cattle had just returned for the first time in several years when I took on the site, but unfortunately much of the fencing had not been looked at, so my first job was to have large areas of the fencing repaired or replaced to make the site fully secure for cattle.



Simon and his trusted companion, Honey

What management techniques do you use on Marden Park?

We're currently looking to extend the chalk grassland meadow, through some hawthorn and ash scrub woodland and into another open area nearby that is currently only being managed by machine. The idea is to link the two areas together and graze them as one unit, thereby effectively more than doubling the amount of managed chalk grassland that we have at the site. We're currently putting grant bids together to hopefully begin work in 2014.

There were also large areas of scrub, mostly blackthorn and gorse, which needed to be reduced. Binswood is in Higher Level Stewardship which pays for some of the management on the site.

What is the condition of Binswood like now?

With the help of volunteers from the South Downs National Park Authority (SDNPA), we've created scallops all the way along the two main paths that run through the woodland, letting in much more light and increasing the diversity of ground flora as a result. The paths are also much drier now, which helps with access. Large areas of the dense scrub have been removed, allowing the cattle to graze into these areas too.

Since the introduction of the cattle, the site is returning back to the typical wood pasture landscape that you'd imagine, with a lovely mosaic of grassland, scrub and mature woodland that's so beneficial for wildlife.



Woodland at Binswood

Can you tell us about any difficulties or issues you've had and how you've overcome them?

For both sites, getting the correct balance of number and breed of livestock and timing for grazing has been difficult, especially when you factor in the variable weather conditions over the past few years. It takes a bit of trial and error, which hasn't always gone down well with local users of the woods. Every site is different and will respond differently to the variable factors of grazing so you can't always take what has worked somewhere else and apply it to your own sites.

The value of SSSIs - 'favourable condition' is just part of the story!

SSSIs are most often referred to in relation to the government target to improve the condition of sites, with the current aim being to have 50 per cent in 'favourable' condition by 2020. However, the 4,000 plus sites across England contribute to many other conservation goals, including protection of our rarest species and helping the environment adapt to a changing climate. Here we look at what the SSSI network contributes to some of the key aims of the national conservation strategy, Biodiversity 2020.

Conserving entire landscapes

SSSI status provides legal protection for the biological or geological interest in some of the most iconic landscapes in England. This includes North and South Dartmoor, the New Forest, Salisbury Plain, and the uplands of the Pennines and North Yorkshire. While many of these areas are also designated as National Parks, the SSSI designation allows for the consistent monitoring and positive management of natural habitats and geodiversity that shapes their distinctive character.

In other parts of England, networks of smaller SSSIs provide a foundation for conservation

measures across wider landscapes. The Meres and Mosses Nature Improvement Area (NIA), for example, covers a large part of Shropshire and Cheshire and includes more than 20 SSSIs notified for wetland habitats. These scattered sites of lowland peat, floating bogs and glacial lakes are highly sensitive to changes in drainage patterns and water pollution. Through the NIA, a partnership of Non Government Organisations, landowners, local authorities and statutory agencies is bringing a holistic approach to the management of these unique habitats and the surrounding landscape.

Another NIA, at Morecombe Bay, also includes a large number of SSSIs and is home to ¼ million wading birds such as bar-tailed godwit, curlew and oystercatcher. Here the NIA partnership is working to establish additional areas of habitat which can act as 'stepping stones' to enable species to disperse more freely across the landscape.



Fenn's, Whixall & Bettisfield Mosses NNR, Shropshire

Conserving the past to help the future

Geology and geomorphology are an integral part of the natural environment. Not only do they shape the landscape around us and the distribution of habitats, but also the natural resources we use and the places we live.

Just over 1200 SSSIs (30 per cent of the SSSI network) in England are designated on the basis of their geology and geomorphology. These SSSIs are critical to our understanding of the history of our planet, past environmental change and the evolution of life on Earth.



Jurassic age ammonites from Dorset

Perhaps best known is England's only natural World Heritage Site – the Jurassic Coast. Made up of 13 geological and geomorphological SSSIs this 95 mile stretch of coast encompasses Triassic, Jurassic and Cretaceous rocks and the coastal processes that have, and continue to shape this dramatic coastline. At the other end of the scale is the small Horn Park Quarry NNR and SSSI, a disused quarry in Dorset. It is particularly noted for its diverse and well preserved fossil fauna which helps us understand the shallow seas that covered the south of England in the Middle Jurassic.

Protecting and understanding our geological heritage is also important to the environmental challenges we face today; for example, it helps us understand the impact and consequences of climate change and plays a vital role in the ecosystem services provided by the natural environment.



Once extinct species such as the short-haired bumblebee are now breeding in England within the relative security of SSSIs

Protecting rare species and preventing extinctions

England's rarest and most threatened species feature prominently across the SSSI series, and for some species a SSSI provides their only known refuge. Upper Teesdale in County Durham, for example, has been described as a 'botanical time capsule' and is thought to be the only home of the hoary rock-rose and the Teesdale sandwort. While at Cressbrook Dale SSSI, the entire world's population of Derbyshire feather-moss survives on a single square metre of precious habitat.

Perhaps the most well known species for which SSSIs have provided refuge is the bittern, which disappeared entirely from the UK at the end of the 19th century. Since the 1990s its population has steadily increased, due largely to focused conservation efforts at SSSIs such as Minsmere in Suffolk and Westhay and Shapwick Heath in Somerset.

Helping to limit the effects of climate change

The soils and vegetation on SSSIs store significant amounts of carbon and play an important role in regulating our climate. Nowhere is this more apparent than in our peatlands which store huge amounts of carbon.

As successive generations of vegetation grow and partially decompose, peatlands absorb carbon dioxide from the atmosphere, locking it in the ground for centuries. However, when these habitats become degraded through inappropriate grazing, burning, wildfires or artificial drainage, exposed peat can release large quantities of carbon dioxide to the atmosphere.

There are almost 1.5 million hectares of peatland in England, a significant proportion of which is notified as SSSIs. These sites have been the focus of a huge effort over the past ten years to reverse the effects of previous management regimes. In places such as the North York Moors and the Peak District restoration work has blocked hundreds of drainage channels cut through the peat, and re-established thousands of hectares of heather moorland. The restoration of this habitat is a long term process, and while it is already paying dividends for flagship species such as black grouse and golden plover, it is also reducing the release of CO₂ to the atmosphere.



Pond dipping at Saltfleetby-Theddlethorp Dunes National Nature Reserve and SSSI - bringing children closer to nature

Increasing public appreciation of nature

Improving the condition of SSSIs provides benefits for people as well as wildlife. Many SSSIs are also designated as National Nature Reserves or form the basis of reserves managed by conservation groups. The Inner Thames Marshes SSSI, a 500 hectare wetland squeezed in between the suburbs of East London and the M25, exemplifies how sites can bring people closer to nature. The area was once used as a military firing range and was closed to the public for more than 100 years. In 2000 the RSPB acquired the site and opened it to the public as the Rainham Marshes Nature Reserve. Today, an innovative visitors' centre and 3.5 miles of walkways enable visitors to have a go at spotting some of the 200 species of birds that have been recorded there.

As well as appreciating wildlife through a pair of binoculars, large numbers of people are supporting their local SSSI armed with a spade or a thick pair of gloves. The challenge of improving the condition of sites attracts thousands of volunteers to help with jobs such as scrub clearance, pond clearing and litter collection. One body, the Conservation Volunteers, which organises volunteer work parties throughout the UK, recorded 37,154 days spent on SSSIs over a five year period – that's 20 people a day.

When species attack

Invasive Non-Native Species (INNS), sometimes known as Alien Invasive Species (AIS), are a growing problem throughout the world, having a major impact on wildlife, industries such as agriculture, and on human health. It's been estimated that the cost of controlling INNS is £10 billion a year Europe-wide, and the total annual cost of INNS to the British economy is estimated at approximately £1.7 billion. Such is the seriousness of the issue that the EU has instigated new legislation to ensure that Member States join forces to tackle these species.

In the UK, a little over 10,000 hectares of SSSI land is known to be affected by INNS. This article will explain the problems these species cause, what's being done about them and what you can do to help.

What is an INNS?

Non-native species are not, in themselves, a problem. They include crops such as potatoes, tomatoes and runner beans, trees like horse chestnut and Corsican pine and many decorative plants. It is only when non-natives become invasive that they're a cause for concern.

Typically an invasive non-native species is one that can thrive in the UK climate, reproduce rapidly and, most importantly, has no natural enemies. If these conditions are met, an organism's population can explode, destroying ecosystems and driving out the wildlife that depends on them.



Floating pennywort infesting a canal

An example of an INNS is floating pennywort, a North American species that was introduced to the UK as an ornamental plant. It has escaped to the wild where it forms huge mats of vegetation that can spread by as much as 20cm a day. Floating pennywort smothers other aquatic plants, blocks light from the water, and grows so thickly it can block waterways creating a flood risk, and even hold up boat traffic.

Other well-known examples of INNS are Japanese knotweed, giant hogweed, parrot's feather, rose-ringed parakeet, signal crayfish, grey squirrel, American mink, killer shrimp and Chinese mitten crab. The list is long and they can affect all ecosystems, from freshwater to grassland and woodlands to the marine environment.

Combating INNS

Although some invasive species, such as Himalayan balsam and American mink, are widespread, their numbers can be controlled to help stop them squeezing out native wildlife, especially where they



Volunteers handpulling Himalayan balsam

affect protected areas like SSSIs. Around the country, there are many examples of SSSI managers and owners joining forces with conservation bodies, volunteer groups and others to limit the impact of problem species.

Aside from physical control, we can also push back against INNS by limiting their distribution. Recently, the UK Government banned the sale of five INNS plant species (floating pennywort, parrot's feather, water fern, water primrose and Australian swamp stonecrop) and introduced the scheme 'Be Plant Wise':

<https://secure.fera.defra.gov.uk/nonnativespecies/beplantwise/> to remind gardeners of the dangers of some decorative plant species.

In addition, a national 'Check, Clean, Dry' campaign has been launched to help stop the spread of aquatic INNS by water users such as boaters and anglers (if you come into contact with water, remember to check, clean and dry your equipment and clothing before using it elsewhere).

<https://secure.fera.defra.gov.uk/nonnativespecies/checkcleandry/>

Biological controls

Another way we can combat INNS is to use biological controls, that is, pests or predators that kill or weaken these species. In the past, some control schemes have had disastrous results (the release of cane toads in Australia is a famous example) but critics often don't realise that these schemes were poorly thought-out and went ahead against all expert advice. Properly researched and managed, the use of biological controls can be highly effective, and they have been used extensively in the USA, Australia, New Zealand and elsewhere.

Asian hornet



Some INNS occur in small, isolated populations, or have not yet reached us. These are referred to as 'Alert species'. One of these is the Asian hornet, an INNS accidentally introduced into France in 2005 that has now spread to the coast of Brittany. The Asian hornet is a voracious predator and represents a threat to honey bees and other pollinating insects. For more information:

<https://secure.fera.defra.gov.uk/nonnativespecies/alerts/index.cfm>

In 2010, CABI released a sap-sucking insect *Aphalara itadori* at a number of UK test sites to gauge its effect on Japanese knotweed. Years of testing had established that the insect did not attack native species, or non-natives of economic importance, and the field trials established that they could successfully overwinter in our climate. Early results are positive, and CABI has now started projects to target Australian swamp stonecrop, Himalayan balsam and floating pennywort. Biological controls cannot eradicate INNS entirely, but they do give native wildlife a chance to fight back.



Removing hottentot-fig from Lizard Point

Hottentot-fig is a serious threat to native plants on Caerthillian to Kennack SSSI, part of Lizard Point in Cornwall, an area identified as one of the top five places for native plants in Britain.

Hottentot-fig grows in dense mats that smothers all other plant life. The land owner, the National Trust, is undertaking an extensive exercise to remove this plant from sensitive cliff habitats and give rare local species a chance to recover.

How you can help

If you suspect there are INNS on your SSSI land, please contact Natural England as soon as possible. The quicker an infestation can be tackled, the easier it is to deal with. You can also help prevent the spread of INNS by following the 'Check, Clean, Dry' guidelines if you come into contact with water, and by making sure your clothing, equipment, vehicles (and pets) are not carrying soil or plant fragments between sites. Ensure that other site visitors, such as contractors, take the same precautions. Please also be aware of Alert species and help the scientific community keep a track of other invasives by recording your sightings through the iRecord website <http://www.brc.ac.uk/irecord/>.

Aside from the Internet, there are a number of free INNS-recording apps, Plant Tracker for example, that you can download to your phone or tablet. <http://planttracker.naturelocator.org/>

For more on INNS go to the Non-Native Species Secretariat (NNSS) website: <https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm>

Improving our service to you

Natural England continually seeks to improve how we do our work and at the heart of this is ensuring that we maintain the often very good working relationship with the 26,000 owners and occupiers of SSSIs. In the last edition of 'Spotlight on SSSIs' we announced that we now aim to provide a response to a valid notice for consent within 28 calendar days even though the statutory deadline is 4 months. Since then we have been working on a range of other measures designed to improve our service.

- We will shortly be launching the Welcome Pack for new SSSI owners containing their Natural England Adviser contact details, the handbook that was published last year and information about their statutory obligations as a new SSSI owner;
- Our Advisers now provide feedback to all managers of SSSIs when they have completed a site visit;
- We are continuing with our suite of SSSI training modules to ensure your Adviser has the necessary knowledge and skills to provide you with the best possible advice.

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 sssi@naturalengland.org.uk

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 sssi@naturalengland.org.uk or call 0845 600 3078

Photo credits

Front cover: Natural England/Peter Wakely

Page 2: Patrick Penny

Page 3: cycling: Essex County Council

Page 3: Red Poll cattle: Julia Bristow

Page 4: Simon Bateman

Page 4: beech trees: Natural England/Georgina Terry

Page 6: woodland at Binswood: Simon Bateman

Page 6: Fenn's, Whixall & Bettisfield Mosses NNR: Natural England/JL Daniels

Page 7: Jurassic age ammonites from Dorset: Bob Chandler

Page 7: short haired bumblebee: RSPB

Page 8: pond dipping: Natural England

Page 8: floating pennywort: GB Non-Native Species Secretariat

Page 9: volunteers pulling Himalayan balsam: Natural England/Catherine Chatters

Page 9: Asian hornet: Jean Haxaire

Page 10: removing hottentot-fig: National Trust

Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

© Natural England 2013

www.naturalengland.org.uk

NATURAL
ENGLAND