Newsletter

Spring 2019

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SBIS GIS (digital mapping) News

Work continued on County Wildlife Site data maintenance. County Wildlife Sites with SSSI designation have now been removed from the Register - these areas will retain protection as SSSI. The exception is Breckland Farmland SSSI, the citation for which concerns Stone Curlews only - CWS within this area have therefore been retained. Any non-SSSI remnants of large sites, such as Rendlesham Forest, are being assessed for retention as "new" CWS, and site visits to them are planned for the coming months. Using SBIS funding, Tracey Housley (Suffolk Wildlife Trust Conservation Adviser) is re-writing many of the CWS citations, and these are being added to the master database at SBIS.

Roadside Nature Reserve data changes, received from Holly Emmens (Assistant Ecologist in the SCC Natural Environment Team) after her review, have also been completed.

Black Poplar data, collated by Sue Hooton (County Recorder for Black Poplar), was mapped for a presentation at the Suffolk Tree Warden Network's Spring Forum in April > . The Forum was a great success, and 14 volunteers signed up to check mature Black Poplars - a very valuable contribution to Black Poplar recording. 30 Parish distribution maps are to be produced by SBIS to help the volunteers in this work.

Orchards East work continues with the production of Parish maps for orchard surveyors and the conversion of STOG data to Orchards East format. Andrea Lovick, a volunteer who is entering the surveyors' results into the Access database at UEA, visited SBIS to discuss data entry.

After Natural England (NE) confirmed to Suffolk Coasts & Heaths AONB that there is a boundary discrepancy (in the Mutford area) between the Designation Order map and the NE AONB boundary as shown on MAGIC, the boundary was amended by SBIS and is now correct at SBIS and the AONB.

SBIS hosted the East of England Local Environmental Records Centres Forum on 4th April, where recording issues, data storage and management were discussed.

Calum Davies, Information Management Specialist (GIS) at Babergh and Mid Suffolk District Councils, visited SBIS to discuss the proposed Suffolk Districts web mapping portal for communities and planners. Many environmental constraints will be shown, but SBIS data, for reasons of data sensitivity, cannot be included and will remain available to partners directly from us.

Commercial data enquiries continue to be busy, with almost 80 searches being carried out over the last 2 months.

The latest data update to Service Level Agreement partners has been made available for download via the website. The data includes species locations and County Wildlife Site, Roadside Nature Reserve and County GeoSite boundaries. Users and GIS data managers have been notified by email.

SBIS Recording News

The Smut fungus *Urocystis colchici* was found at Suffolk Wildlife Trust's Martin's Meadow (Monewden Meadows SSSI) in May. This Priority Species (Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is Critically Endangered; and one of Kew Garden's Lost and Found Fungi Project target species >. There were good numbers of the fungus in all three fields.

Smut fungus *Urocystis colchici*
Credit Neil Mahler

According to the Kew Lost and Found Fungi Project, the smut is found on leaves of *Colchicum autumnale* (autumn crocus, meadow saffron, or naked lady) and has been recently known from only four sites, in Herefordshire, Oxfordshire, North Wiltshire, and Breconshire; plus a very few records from garden plants.

Riparian Tree Planting in Suffolk

Naomi Boyle, Environment Agency

In February Environment Agency (EA) staff spent a day planting native trees along 2km of EA owned land along the Minsmere New Cut at Eastbridge. Not only will these provide biodiversity benefit in terms of habitat and keeping the river cool but in time will provide dappled shade help to control the growth of some of the more aggressive in-channel vegetation. This will reduce the future need for weed cutting in this sensitive area by our Operations team.

We have also been working in collaboration with Suffolk Wildlife Trust and have planted over 30 native trees along the River Wang at Hill Farm Marshes, Wangford and a further 40 trees along the River Deben at Kettleburgh which included a male and female black poplar of local provenance and an area of scrub.

Riparian trees are a key component of river ecosystems:

- they provide physical habitat diversity that in turn supports a diverse range of animal and plant species
- they provide underwater root systems of value to fish and invertebrates
- tree root systems stabilise river banks and protect them from erosion, especially on the outside of bends
- by providing shade, trees suppress growth of aquatic vegetation and moderate extremes in water temperature.
- in the longer term, tree cover can provide a natural source of woody debris, a key component of river systems that is lacking in many lowland watercourses
- tree planting can enhance local landscape quality
- trees provide nesting sites for birds, and a food source for mammals, birds and invertebrates.

If you are the owner of, or know of ,riparian land in Suffolk where tree planting could be beneficial, then do please contact Naomi Boyle Catchment Co-ordinator for Suffolk naomi.boyle@environment-agency.gov.uk. We are particularly looking for sites within the River Gipping catchment (including the Belstead, Somersham, Haughley, Coddenham, Wattisham and Great Finborough watercourses and the Rivers Gipping, Rat and Jordan) for winter 2019/20 planting.

Home Farm, Kettleborough

EA staff planting trees along the Minsmere New Cut on a glorious February day

Fen Raft Spider nursery counters needed!

Helen Smith

Our fabulous Fen Raft Spiders need new friends to help monitoring of their nursery web numbers in Suffolk and Norfolk. As well as the remnant natural population at Suffolk Wildlife Trust's (SWT) Redgrave & Lopham Fen, new populations created by translocation are starting to thrive elsewhere in the Broads.

Monitoring training is offered at **SWT Carlton Marshes at 10.30 am on Sunday 30th June,** with volunteering possibilities there, at Redgrave & Lopham Fen and on the Ludham Potter-Heigham Marshes. To book the Carlton course, contact Ellen Shailes (ellen.shailes@suffolkwildlifetrust.org).

If you can't make it but are keen to get involved at any of the above sites, or if you would like more information, please email Helen Smith (helen.smith@wavcott.org.uk).

Adult female Fen raft spider

SWT Carlton Marshes training course

Female Fen raft spider with young, Cantley

Broads Authority Flood Risk Management Survey

Andrea Kelly, Broads Authority

We're currently running an online survey regarding flood risk and flood management in the Broads over the coming decades. The survey is under the banner of the Broadland Futures Initiative, a partnership project we are involved in with the Environment Agency, local councils, National Farmers' Union and numerous other organisations. The main aim of the survey is to gauge the level of understanding in local communities regarding flood-related issues and to seek local support for the project.

It is primarily intended for local residents and community groups, however we are aware that many readers of the SBIS newsletter fit into this category - If this is the case, it would be helpful if you could complete the survey and share it with anyone else you feel is relevant.

The link can be found here > and we also have paper copies if needed. The survey is live until the end of July.

Breckland and its Rabbits: Pest or Habitat Engineer?

Pip Mountjoy, Shifting Sands Project

The way that we view rabbits, and their impact on the environment, tends to either be 'pet-oriented' – fluffy or cartoonish, or negative: they're seen as a pest whose populations need to be controlled. After all, they "breed like rabbits", right?

Well, it's not quite that simple.

Whilst it's true that a rabbit on cropland, pasture or on the golfing green is a pest, in some semi-natural habitats, like grassland and heathland, rabbits play an essential role as habitat engineers. This is particularly true in Breckland (or 'The Brecks'), a unique heathland-grassland mosaic that spans the Suffolk-Norfolk border. An area of chalky sandy soils that is much drier than the rest of the UK, with cold winters and hot summers, Breckland is a steppe-like bio-geographical region that has incredible biodiversity, often including species more often found in central European steppe habitats.

Rabbit disturbed ground East Wretham. Credit: Phoebe Miles

Much of the heath was converted into cropland and agro-forestry in the twentieth century. However the region still hosts nearly 13,000 species, many of which are rare or threatened, and some of which are found nowhere else on earth. A large suite of these threatened species are dependent upon very specific conditions; they require dry, open areas of low-nutrient heath and grassland. Such conditions do not remain by being left alone with no human or animal activity! In the Brecks, it's the rabbits that have been maintaining these open, short-sward mosaics, with patches of bare ground since they were first farmed here, over 1000 years ago. In fact, today wild rabbits are the only non-mechanical (and free of charge!) means of bare ground creation and habitat management, given that the old land uses which broke and poached the ground are no more (e.g., low-scale mineral extraction, rabbit warrening and sheep droving).

Codson Hill. Credit Bev Nichols

Sheep, ponies and cattle are used by conservationists on the heaths as they to help maintain shorter swards but they can't do what rabbits do: very fine-scale, selective grazing, burrowing and scraping. This creates a 'micro-mosaic' of bare earth which acts as open spaces for annual plants (such as spring speedwell and Breckland speedwell) to germinate, and for lower plants (such as lichens and mosses) to persist without being smothered by the more competitive grasses. Rabbits also create a dynamic habitat that's great for invertebrates (including beetles, bees, butterflies and moths) that like to hibernate or pupate in longer swards near to nectar-rich flowers, and need patches of bare ground for basking and boring.

As the main ground disturbers on Brecks heaths, rabbits also excavate seeds that may have lain dormant in the seed bank for 80 years, and they unearth huge amounts of flint. It's these flint stones that make the habitat suitable for the iconic Brecks bird – the Stone Curlew. As the name suggest, the bare patches of warm, sandy earth with scattered flint stones camouflages the eggs of this species, providing perfect ground-nesting conditions.

But rabbit populations are in sharp decline, and their numbers have been falling drastically here since the 1990s, mostly as a result of various diseases introduced into the environment by humans wishing to control their numbers. With fewer rabbits, the Brecks heaths are becoming overgrown with coarse grasses and scrub. Smaller plants and invertebrates have less of the varied micro-mosaic they need to survive.

Pip Mountjoy and Diana Bell first burrow. Credit: Phoebe Miles

We're working with the University of East Anglia's Dr. Diana Bell to help rabbits bounce back. In partnership with landowners and conservation organisations including *Natural England, Suffolk Wildlife Trust, Norfolk Wildlife Trust* and *Elveden Estate,* we are trialling practical habitat enhancements on the heaths to try and encourage rabbit breeding and boost localised rabbit numbers, to build resilience and give those populations a chance at survival. We are breaking the ground in areas where the turf has grown too thick, creating areas for rabbits to burrow into, as well as creating predator cover to act as refuges. We are monitoring populations and will share our findings far and wide to help those who manage open habitats retain rabbits, their vital habitat engineers.

Shifting Sands is part of the Heritage Lottery Funded *Back from the Brink* programme. We are also working with others to restore conditions for rare plants and insects on heathland SSSIs, within agri-forestry units and in urban areas. If you'd like to find out more about the project, visit www.NatureBftB.com or get in touch at ShiftingSands@NaturalEngland.org.uk.

Image: Natural England/Allan Drewitt

Colouring in the Margins

Zoe Morrall, Plantlife

Back from the Brink is one of the most ambitious conservation projects ever undertaken.

Its aim – to save 20 species from extinction and benefit over 200 more through 19 projects that span England from the tip of Cornwall to Northumberland.

It's the first time ever that so many conservation organisations have come together with one focus in mind – to bring back from the brink of extinction some of England's most threatened species of animal, plant and fungi. One of the many projects running under the Back from the Brink programme is called Colour in the Margins. Our mission is to help people of all ages reconnect with the arable landscape that surround our towns and villages. We'd love everyone to learn more about the unique and often rare plants and animals living amongst our crop fields and to celebrate the rich arable heritage that has come from a long history of farming.

Arable farmland (land that has been cultivated or prepared for growing crops) is vital for the wildflowers and animals that have co-existed with us since the dawn of agriculture. Arable plants, such as the Corn buttercup and Red Hemp-nettle, have been affected by changes in agricultural land use such as the increased use of herbicides and fertilisers, development pressures and changes in agricultural farming practices. By working collaboratively with farmers and land owners and increasing awareness of this fabulous suite of plants to people of all ages, we can bring back the colour to our arable margins. For example, Breckland is home to over 120 nationally rare and threatened plant species, many of which grow nowhere else in Britain including the Fingered Speedwell.

There are lots of ways to get involved as a volunteer, whether you'd like to get active, learn new skills or meet like-minded people. Over the summer of 2019 we have lots of different events happening including guided walks and arable workshops for land owners, as well as opportunities to contribute to our Arable Memories campaign.

To find out more about Colour in the Margins or to request our companion guide Mosey in the Margins, please email zoe.morrall@plantlife.org.uk

Corn buttercup *Ranunculus arvensis*
Credit: Cath Shellswell

Red hemp nettle. Credit Rob Blacker

Bookings open for Dedham Vale AONB and Stour Valley Forum 21st June 2019

Please join us to hear a wonderful selection of speakers on environmental education, landscape heritage; emerging farming policy; how to save our swifts; and the special qualities of the AONB and Stour Valley by national expert Alison Farmer. Optional field trips to Daws Hall Nature Reserve or Mount Bures Castle, led by experts. Plus, networking opportunities and lunch at the fantastic Shrubs Farm Barn, by kind invitation of Robert and Sara Erith. Book now before its too late… Download the programme > Alternatively contact simon.amstutz@suffolk.gov.uk to arrange your booking.

Ellie Mead addressing the Dedham Vale AONB and Stour Valley Forum 2018 at Shrubs Farm Barn .

Grants available - Dedham Vale AONB

There are Sustainable Development Fund grants still available from the Dedham Vale Area of Outstanding Natural Beauty (AONB) for activities to conserve and enhance the AONB, after a first round of applications awarded just under £20k of the £30k set aside.

The new deadline is Sunday 30 June 2019. Click here for details > or contact Cathy Smith - email catherine.smith@suffolk.gov.uk for guidance.

Beachwatch - AONB news

Suffolk Beachwater Results 2018 are in! Litter surveys were carried out on 32 beaches covering 6.5km. 1,323 volunteers took part. 1,204 plastic caps and lids were collected. 20,843 items of litter were removed. 77% of litter collected was plastic or polystyrene.

The volunteers have done absolutely outstanding work and everyone that enjoys the natural environment should thank them for their fabulous effort.

Salt Marsh Citizen Science Opportunity

Cai Ladd, Prifysgol Bangor / Bangor University, North Wales

I am a coastal scientist currently working with a team of researchers looking into the importance of salt marshes in absorbing CO_2 to combat climate change. Our research project is called '*Carbon Storage in Intertidal Environments' (C-SIDE).*

C-SIDE is collecting lots of soil samples from salt marshes across England, Scotland and Wales. In the lab, we're measuring how much of this soil is organic carbon (made up of things like roots and dead leaves) and we are then using the samples to go back in time - 12,000 years in fact - to see how carbon storage has changed since the Last Ice Age. You can find out more about the C-SIDE project here >

Though we're covering as much of the British coastline as we can, we can't do it on our own. **We need Citizen Scientists to help us!** Here's what we're asking volunteers to do:

1. Head down to their nearest saltmarsh and follow instructions using the 'Saltmarsh App' to complete a simple plant and soil survey.
2. Collect nine small soil samples using equipment we'll provide by post.
3. Return the samples to us with a pre-paid envelope.

Everyone can find their nearest saltmarsh using the interactive map here > . We're hoping to get volunteers out collecting samples over the upcoming summer period.

To thank volunteers for their hard work, they'll be credited in any output we produce. We'll also keep you updated about how the project's going and how it's making a difference.

If you or your team/network could help, please let me know at cside@bangor.ac.uk and I'll send out an information pack with instructions on how to carry out a survey. The survey doesn't take long, and it's a great way for people to explore their local salt marsh!

New family courses from Suffolk Wildlife Trust

Suffolk Wildlife Trust has launched a series of nature-inspired courses aimed at adults and young people learning together. The courses, ranging from hedgehog ecology to spoon carving are new for 2019 and have been developed in response to a growing interest from young people in the Trust's programme of adult courses.

Hedgehog officer Ali North, leading a small mammal course in Christchurch Park. Credit: John Ferguson

The organisation already runs hundreds of events and activities at its nature reserves and learning centres for children and families, as well as a full programme of adult learning opportunities. But, until now, there was nothing specifically aimed at older children (11-16) and accompanying adults. The Trust hopes the mix of art, craft and natural history will appeal to families wanting to spend time together learning new skills and more about the natural world around them. Find out more on SWT websiite >

Volunteer Damselfly Surveys

Eleanor Colver, British Dragonfly Society

The British Dragonfly Society is looking for enthusiasts to help investigate the distribution of the White-legged Damselfly, one of the UK's prettiest insects.

The White-legged Damselfly is a delicate little insect that can be found fluttering along lushly vegetated margins of rivers, streams, pools and lakes in southern England and Wales. In recent years there have been increasing concerns that this elegant species is disappearing from some parts of the UK, including Suffolk. However, our understanding of White-legged Damselfly population trends is limited by a lack of long term data; thus, the British Dragonfly Society has launched the White-legged Damselfly Investigation.

Surveys run between May-August and ideally volunteers will visit their chosen survey area 3 times within this period, on warm, sunny days.

The survey is easy to carry out and is a great activity for beginners looking to learn more about their local wildlife.

Please visit the White-legged Damselfly Investigation project page for more information >

White-legged damselfly ***Platycnemis pennipes*** Credit: Nick Mason

Mapping Bird Visits in Felixstowe Gardens

Adrian Cooper, Felixstowe Community Nature reserve

Earlier this year, the Felixstowe Community Nature Reserve Citizen Science Group completed a pair of raster maps showing the number of bird visits in two local gardens. In each case, the maps showed where each garden had its greatest strengths in attracting birds during the research periods. They also showed where the garden owners may wish to do more work in making other parts of their gardens more bird-friendly.

For both maps, the work began by marking out the garden areas into quadrats. The Citizen Scientists then left each garden owner with an A3 sized sheet of paper on which the quadrats were shown, and on which the bird counts for each quadrat could be recorded.

In the case of the first map, the garden owner described the experience as "thoroughly enjoyable".

Gloria: "I'd never done any citizen science before, but everything was explained to me, so I felt really well supported. It was something I really became excited about."

The other garden owners shared Gloria's enthusiasm:

Trish: "It was intense! We took half the garden each, and switched sides every other day so our total count was as balanced and accurate as possible."

Mick: "It was good, and we got a lot out of the experience."

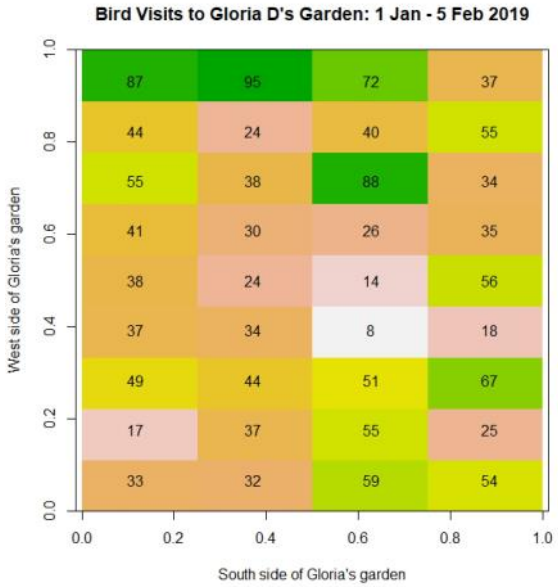
When the counts were complete, they were entered into R software by members of the Felixstowe Community Nature Reserve Citizen Science Group. R's raster library was used to produce the maps after the vector data had been converted to matrices.

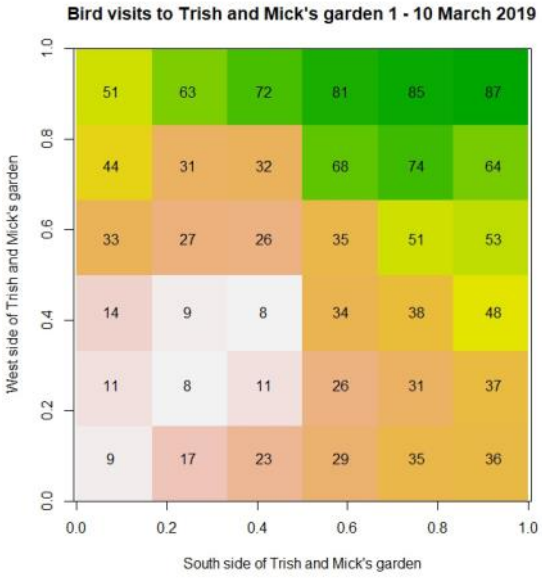
Gloria: "I love that map. It's something that I felt totally involved with, and it shows where my garden is at its best in attracting birds, and where I might want to change things round a bit to make things better in other parts of my garden… It's really helpful."

Trish and Mick agreed with Gloria's conclusions:

Trish: "This is our map, and that means a lot. We both loved doing the data counting. It's something we'll try for ourselves in twelve months time, to see how things have changed.

Mick: "We'd recommend it to anyone who loves birds."





Felixstowe's Community Nature Reserve celebrates its 4th Birthday!

Adrian Cooper, FCNR

Looking back over the last four years, it's definitely been a time where we've made good progress toward our conservation targets – but we've also been able to make many new friends far and wide.

When we started, our main goal was to encourage 1,666 local people to each allocate at least 3 square yards of their back gardens for wildlife-friendly features such as plants, ponds, bird feeders, hedgehog homes, insect lodges and re-wilding. That level of participation would create a network of green spaces across Felixstowe, in the form of a community nature reserve, which is the equivalent in area to a full-sized football pitch. In only our first four years, we've attracted just over 1,300 local people with an average allocation of 3.65 square yards for each participant. That means that we've almost completed our goal of creating an area equivalent to a football pitch of 5,000 square yards.

One of the encouraging features about this work is the way other communities have been inspired by these ideas. In the Leicestershire village of Cosby, they started their own Community Nature Reserve directly based on the work in Felixstowe. In Bristol, they began a Schools' Nature Reserve, where six schools across the city each have their own conservation area. In Hampshire, the idea of community nature reserves like ours has been woven into one of their Local Plans.

Our Citizen Science Group has been pleased to share its data analysis and collaborative mapping projects through Suffolk Biodiversity Information Service, as well as the National Biodiversity Network – the UK's largest network of conservation groups.

It was also great fun to work with Digital Media students from the University of Suffolk in the production of a documentary about our work. That film has been viewed over 800 times!

We have also made new friends on the international stage. In the United States, Communities Magazine has featured our work, as well as the work of our Citizen Science Group. In Europe, we've made new friends among the European Citizen Science Association. Through some of those friends, our work became featured in one of the blogs which promoted the international Citizen Science Day on 13 April this year. Also in April, our work was discussed at the UKSG conference in Telford. From Copenhagen, we recently welcomed an MSc student who wanted to visit Felixstowe to learn more about what we are doing and how we are doing it.

To learn more about the work of Felixstowe's Community Nature Reserve, please visit our Facebook page at www.facebook.com/felixstowecommunitynaturereserve

Brecks Fen Edge and Rivers Project

Nick Dickson, Brecks Fen Edge and Rivers Landscape Partnership

The Brecks Fen Edge & Rivers Project held its development conference and consultation event in Thetford on 13th March. It was attended by over 100 people, including partners, volunteers and interested individuals. The event gave attendees an opportunity to learn more about the scheme, contribute feedback on the proposals and sign up to participate. Speakers highlighted the importance of the Brecks Fen Edge and Rivers for biodiversity, archaeology and recreation, and set out the range of projects the partnership will deliver to address threats and opportunities to the landscape heritage. Partners set out stalls giving more details on projects, and asked attendees to contribute their knowledge, experience and opinions. In addition, there was an opportunity to try some hands-on creativity by making aquatic art to feature in a pilot engagement event at this year's River Day in Thetford.

Visit Brecks Fen Edge & Rivers website >

Saproxylic beetle *Cyclorhipidion bodoanum* new to Britain found at Sotterley Park

Howard Mendel, Coleoptera Recorder for Suffolk

During the summer of 2017, a survey of saproxylic beetles was carried out in Sotterley Park, east Suffolk, using aerial window traps, a type of interception trap. Amongst the beetles collected were three small (*c.* 2mm long) specimens of a bark beetle identified by Howard Mendel as a species of Xyleborini new to Britain.

The beetle was subsequently identified by Miloš Knížek from the Czech Republic as *Cyclorhipidion bodoanum* (Reitter).

Sotterley Park is an island of grazed pasture woodland, mostly to the south and west of Sotterly Hall, in a landscape of farmland and secondary woodland. Its origins are obscure, but it is thought to be of medieval age by Harding (1978) who reported on the significance of the site following visits in July 1973 and June 1975.

Oak is the dominant tree species in the park and there are maidens and pollards, including dead, standing trees. The older oaks are thought to be 300-400 years old, and possibly older. In addition there are old ash *Fraxinus excelsior* pollards and occasional hornbeams *Carpinus betulus* and maples *Acer* sp. and other non-native species. Blocks of secondary woodland at the margins of the park also include sweet chestnut *Castanea sativa*.

C. bodoanum will attack a range of host trees in the family Fagaceae (Kirkendall & Faccoli, 2010) which includes oaks, beech and sweet chestnut. The species is xylomycetophagous (Beaver, 1989), dependent on fungal growth ('ambrosia') in the brood galleries.

The genus *Cyclorhipidion* (Hagedorn) is of Asiatic origin. At the time the Palaearctic catalogue was published (Knížek, 2011), *C. bodoanum* was already known from Austria, Belgium, Croatia, France, Germany, Italy, The Netherlands, Sweden and Switzerland, and so its occurrence in Britain is no great surprise. A natural spread is conceivable as Sotterley Park is only about 8 miles from the Suffolk coast and it is then about 106 miles across the North Sea to The Netherlands. However, *C. bodoanum* is more likely to have been introduced into Britain with timber products or perhaps sapling trees. Although the Sotterley Estate has a sawmill, it only processes British timber, the majority of which has been kiln dried (Mr Tom Barne, pers. comm.), making this an unlikely route of introduction.

Sotterley Park *C. boadanum* Credit: Harry Taylor

References

HARDING, P.T. [1978]. *Sotterley Park, Suffolk*. Unpublished report (section 1.6.1) to the Nature Conservancy Council (commissioned from Institute of Terrestrial Ecology).

BEAVER, R.A. 1989. Insect-fungus relationships in the bark and ambrosia beetles. pp. 121- 143. In: Wilding, N., Collins, N.M., Hammond, P.M. & Webber, J.F. *Insect-fungus interactions*. London: Academic Press Ltd.

KIRKENDALL, L.R. & FACCOLI, M. 2010. Bark beetles and pinhole borers (Curculionidae, Scolytinae, Platypodinae) alien to Europe. *Zookeys* **56**: 227-251.

KNÍŽEK, M. 2011. Scolytinae Latreille. In: Löbl, I. & Smetana, A. (eds.) 2011. *Catalogue of Palaearctic Coleoptera*, vol. 7, Curculionoidea I. Stenstrup: ApolloBooks.

Anglian Water and Groundwork celebrated World Oceans Day on 8th June

Chloe Robisonsmith, Groundwork East

Groundwork joined up with Anglian Water's Keep it Clear programme to celebrate our seas as part of World Oceans Day on Saturday, 8th June.

It was an opportunity to emphasise the need to protect our coastlines from pollution. A healthy world ocean is critical to our survival. Whether you live close to the sea or inland, a little change makes a big difference.

Did you know that 80% of marine plastic waste comes from land-based sources?!

Beach activities 30th August 2018

What is the problem?

Environmental pollution is distressing and costly to put right. It can occur when there has been flooding as a result of an avoidable blockage in the sewer system. Avoidable blockages are caused by things such as fats, oils and grease (FOG) being put down the sink, or wipes and other bathroom waste being flushed down the toilet. These are called unflushables.

Along with litter, unflushables can potentially cause devastating impacts for wildlife and our oceans, as many washed up plastics and wipes are mistaken for food by all sorts of precious marine life. Unflushables also make up nearly 10% of all beach litter!

But, these blockages, pollution and litter can be prevented if we all remember to '*Keep It Clear*'.

What is '*Keep It Clear*'?

Anglian Water's *Keep It Clear* programme is encouraging people to dispose of items correctly, to reduce the problem of pollution caused by avoidable blockages entering our environment and oceans. Groundwork is working to engage communities in Lowestoft, Ipswich and Colchester on the *Keep It Clear* message, by attending events and handing out free items to help prevent avoidable blockages. For details on how Groundwork is supporting the Keep It Clear programme, please click here.

Lowestoft beach activities 29th August 2018

Anglian Water worked with Keep Britain Tidy, BeachCare and RiverCare as well as organisations such as City to Sea to highlight the issues on World Oceans Day and the need to protect our vital oceans. Find out more on the Anglian Water website here.

What can you do to help?

Help to protect our oceans and beaches by pledging to only flush the 3Ps (pee, *toilet* paper and poo) and never ever pour fat, oil or grease down the sink or drain. Tell us what you did to celebrate World Oceans Day at @groundworkeast #WorldOceansDay

Noble Chafer Survey

People's trust for Endangered Species

London-based wildlife charity People's Trust for Endangered Species (PTES) and Royal Holloway University of London have joined forces to launch a new national beetle survey, in order to conserve the beautiful, but threatened, noble chafer beetle.

PTES and Royal Holloway are looking for volunteers to look for noble chafers over a two-week period in June, to find out where they are still living in the UK, allowing conservationists to help save them from extinction.

Volunteers will be asked to set up a (harmless!) trap and fit it with a chemical lure – specially developed to attract noble chafer beetles, meaning it shouldn't attract many other insects. The trap will need checking daily and any beetles need to be photographed then released. Full instructions and equipment will be given to all volunteers. Noble chafers don't bite, so it is safe to handle them.

This survey is being coordinated by Dr Deborah Harvey, Postdoctoral Research Fellow, at Royal Holloway and is funded by PTES. To find out more information and to take part in the survey, contact Deborah on: d.harvey@rhul.ac.uk.

Dr Deborah Harvey, Postdoctoral Research Fellow at Royal Holloway says: "Noble chafers are fascinating beetles – adults are typically only seen for a few weeks in a year, which is why this two-week survey period is essential in order to see how their populations are faring. It's incredibly important for us to know where noble chafers are living and where they're not, so we can work to ensure the survival of this native species."

Noble chafers are beautiful beetles with iridescent, shiny green bodies (although also copper and gold) speckled with white. They are small, with adults being about 2cm long, and are believed to live in traditional orchard habitats where they depend on old, decaying wood for food and shelter. As with many native species, noble chafers are threatened with the loss of their primary habitat – the deadwood at the heart of old, decaying trees.

Laura Bower, Conservation Officer at PTES adds: "We know noble chafers have populations in the New Forest and in traditional orchards in Kent and the Three Counties, as well as some isolated records in Buckinghamshire and Oxfordshire. We want to build on this and expand our knowledge of the noble chafer's population range. Anyone in the UK can take part, so we hope that volunteers can help us by checking traditional orchards, gardens and wood pasture sites in areas where they are currently known to exist but also where we don't yet have records, to see if they are there or not."

To find out more about the noble chafer, visit www.ptes.org/noblechafer

Noble chafer *Gnorimus nobilis*. *Credit: PTES*

Waldringfield Village Verges

Christine Fisher Kay, Waldringfield Tree Warden

The Verges project was one of the first undertaken by the newly formed Waldringfield Wildlife Group around 2007, proposed enthusiastically by founding member the late Angela Mace. Like many villages our open spaces and verges were mostly maintained as short grass and kept mown short all the year round. The proposal was to allow some of these verges to become more like meadow for at least part of the year to encourage diversity of insect life and to become more useful foraging areas. Flowering plants grown from bulbs or plugs would supply nectar for bees, butterflies and moths and a variety of wild plants, including grasses, would be food plants for caterpillars and provide fruits, seeds and foliage for insects, birds and small mammals such as hedgehogs and voles to feed on.

An early snowdrop planting work party with Angela Mace in the centre.

Approaches were made to local residents who had verges fronting on to the main road through the village. Waldringfield Parish Council (WPC) supported the project and agreed to modification of the mowing contracts which were then with Suffolk Coastal District Council, now with NORSE, to stop mowing in the early part of the year in certain areas. WPC only controlled maintenance in a few of the sites and in the playing field.

Initially about 13 sites were selected, including four maintained by the PC, the rest being privately owned. Many members of the wildlife group raised plants from seed which were then planted out in the verges. WPC gave a grant which enabled the purchase of wildflower seed from local sources and bulbs. The appearance of the early crocuses and daffodils in verges were the first signs that something different was happening. Their foliage helped to mark areas where cutting was to be suspended. Small wild daffodil species *Narcissus pseudonarcissus lobularis* and the Tenby daffodil *Narcissus obvallaris* were used.

Snowdrops were planted 'in the green' and also in autumn as bulbs. Both were successful. Waldringfield Primary School children planted snowdrops in the verges close to their school, and later they planted 1000 wild daffodils around the two sides of the playing field which are allowed to grow long. Lots of *Crocus tomasianus* were used for early spring colour and nectar. Although many of the flowers and bulbs were native, the use of easily naturalized non native species helps to extend the season and supply nectar for a longer period as well as adding colour and interest. Other non natives used were Muscari, *Gladiolus byzantinus* and Camassia bulbs. Native bulbs included Ornithogalum (Star of Bethlehem), *Narcissus poeticus* 'Pheasant's Eye', and Snake's head fritillaries.

Muscari with small tortoiseshell butterfly

Snake's head fritillaries

The aims were to encourage wildlife and plant diversity but also to make the verges more interesting and attractive. Some privately owned verges were already very pretty with primroses and early bulbs. As more and more articles in the press and TV programmes appeared extolling the importance to wildlife of wild patches of grass and 'weeds' and being less 'tidy' it seemed we were on the right track.

Cowslips originally grown as plugs and planted into the grass

The project was not however universally popular with some residents objecting that it looked untidy. Efforts were made to address this without losing the value of the foraging areas. Grass cutting by the local authority sometimes took a while to happen due to the weather or illness, so that in a wet year the grasses became long and untidy. One way of dealing with this was to have a partial cut to about half height, say 20cm, in late May - mid June and then another cut later. After the first cut it never seemed to grow so strongly again and other later flowers appeared, such as Yarrow.

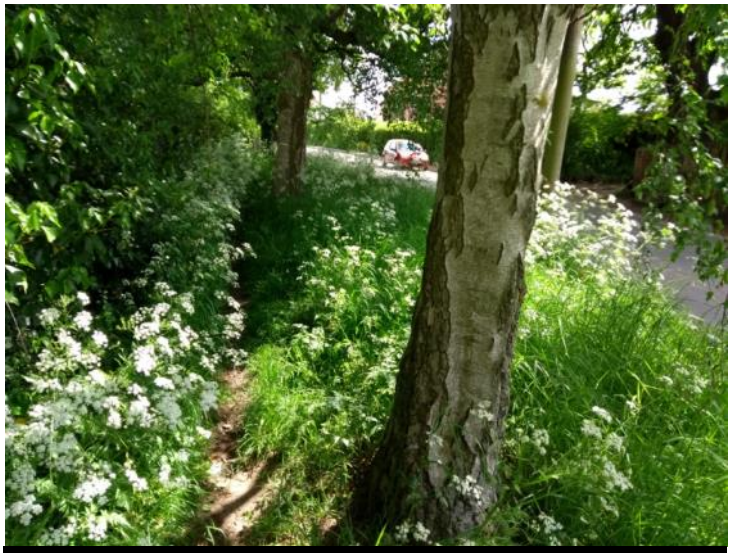
We have also now acquired scythes which are useful for getting into these areas and giving them a chop when necessary. After cutting the areas are raked off and the cuttings removed to compost heaps to reduce fertility. We have also attempted to introduce the parasitic (on grasses) plant yellow rattle, but without success so far.

The School Road verges are now protected by bollards to prevent people parking on them. The rear of the verge will be left long all summer, as will the area within the playing field fence, which is also planted with various bulbs and also some fruit trees under the Scattered Orchard Project. Both together form a strip up to 8m wide of long grass and herbaceous plants.

It has been noticeable that in drought years the longer areas retain some green colour after the closely mown areas have gone quite brown, indicating that they help moisture retention in our sandy soil by shading it. They are also supplying cover and shade from the sun for their inhabitants.

Areas of long grass neatly cut around to emphasise that they are meant to be there.

School road with plants on verge protected by bollards



This verge formerly cut short is now full of cow parsley in late spring.

Stitchwort grown from seed gathered locally

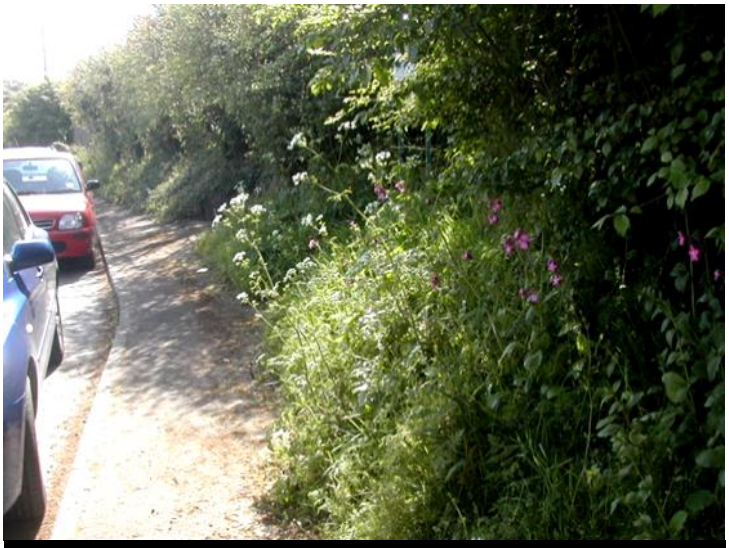
We do not know if there are more insects, hedgehogs or other species than we would have had anyway, but bees and butterflies are often seen on these verges. We must be supplying some feeding territory for the song thrushes, swallows and house martins which are often seen around the village in summer. Hedgehogs continue to appear in the village, although there are not so many as we remember from 20 years ago.

The flower plugs were successful in some instances for example, cowslips established from plugs grown from seed continue to appear year after year in a wetter part. Greater Stitchwort grown from seed makes a good show.

This is all very different from the floral meadows idea as seen at the Olympics, where very colourful annuals were seeded into bare ground. These have to be repeated each year. Our areas are mostly cut short and stay as green grass through the winter as we cannot spend time killing off our existing vegetation and sowing new seed every year. The procedure has to be low maintenance, permanent and practical.

Over the years some verges have changed hands and dropped out of the scheme, but new ones have come in and sometimes people just start encouraging wild plants themselves, the easiest way being to change the frequency and timing of grass cutting.

Sometimes all you have to do is stop mowing and wild flowers such as buttercups just appear.



Cow parsley arrived on its own, the red campion was planted.

Playing field edges in high summer before being cut.

Two sides of the playing field are allowed to grow long during summer, but we are trying to reduce the fertility of the grasses by cutting and raking off at intervals, and introducing parasitic yellow rattle.

The project has been supported by Waldringfield Parish Council every year so that more bulbs could be planted and the revised mowing regime kept up. At certain times of year the effect has been quite magical and commented on by many residents. The flowering varies from year to year under different weather conditions.

The group hopes that more residents will be encouraged carry out their own wildlife supporting planting in their gardens. Recently there has been a noticeable trend to replace hedges either with fences or hard driveways to allow more off-road car parking. Although the village has become greener in some ways there are always more battles to be fought.

All photos by Christine Fisher Kay

Further information

In 2018 the Waldringfield Wildlife Group produced a booklet illustrating the verges project and several other projects including barn owls and swifts, which can be accessed on the Waldringfield parish council website >

The booklet can also be downloaded at Greener Waldringfield >

Christine Fisher Kay (Tree Warden for Waldringfield, Waldringfield Wildlife Group member and landscape architect).

Slimy-fruited Stonewort Found in East Suffolk

Juliet Hawkins, Suffolk Wildlife Trust Farm Conservation Adviser

Slimy-fruited stonewort *Nitella capillaris* was found recently in a pond in east Suffolk after a gap of 60 years. It is categorised as 'Extinct' in Great Britain; the last record was in 1959 from Sutton, Cambridgeshire (Moore 1986). Not only is the species rare because it is exacting in its requirements of clean water, lack of competition and newly restored ancient ponds, but it only fruits and becomes visible during April-June. This gives a short window of opportunity for finding them, although this is also the newt surveying season when surveyors might be expected to encounter the plants. However, the spores can remain dormant for many years.

N. capillaris is found in most countries in Europe, but the fertility of the species is very low, and the number of localities has decreased by nearly 90% (Algae Database).

Stoneworts are non-vascular plants, being branched multicellular algae that do not have flowers. *N. capillaris* is dioecious with separate male and female plants.

Juliet also found Tassel stonewort *Tolypella intricata* (Endangered) in two neighbouring ponds and Clustered stonewor *Tolypella glomerata* (Nationally Scarce) in another nearby pond.

Nitella capillaris male

Nitella capillaris female

All photographs by Chris Carter

References

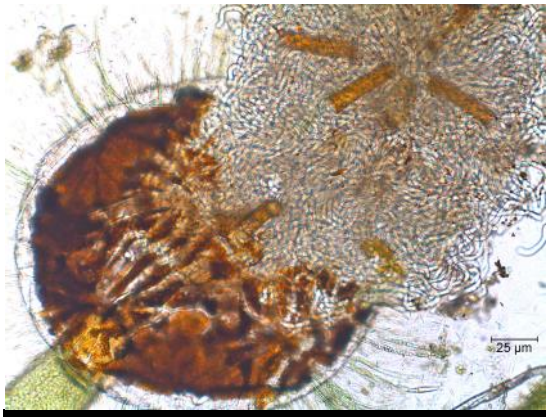
MOORE, J.A. (1986) Charophytes of Great Britain and Ireland. BSBI Handbook

Algae Database http://www.algaebase.org/search/species/detail/?ecies_id=123024

Nitella capillaris oogonia on female plant

Nitella capillaris antheridia on male plant

Nitella capillaris shoot



Nitella capillaris split antheridium

Sharing information about Suffolk's wildlife

Suffolk Biodiversity Information Service is the One-Stop-Shop for biodiversity information in Suffolk. Operating as an independent and objective centre for biodiversity data we collate, manage and mobilise species and site information for the benefit of Suffolk's wildlife as a whole.

News SBIS website >

Events SBIS News / Events >

Funding Opportunities Check out the SBIS web page to see if any of these funds can benefit your conservation or community wildlife project. SBIS News / Funding >

Project Fund We have a small Project Fund available to individuals and communities for research, habitat enhancement or to benefit Suffolk species. Please contact Gen Broad if you're looking for funding for your project.

We welcome species records from the public. You can make a valuable contribution to wildlife conservation - why not try out SuffolkBro online? It's easy and fun!

All records are verified via iRecord and our County Recorders and then added to our database for Suffolk (currently 4.27 million). Species records help us to understand the distribution and patterns of Suffolk's wildlife as well as informing the conservation activities of key partners and the planning process.

Follow us on Twitter @Suffolkbis > Like us on Facebook > Share photos on Flickr >

Newsletter Publication dates : Spring, Summer, Autumn and Winter.
Deadline for Summer 2019 newsletter articles: **Friday 9th August 2019.**

If you'd like to share the work that you or your organisation / group is doing to protect biodiversity in Suffolk, please send your article (with photos) for inclusion in the next newsletter to Gen Broad. Contact details below.

Thank you to our readers for supporting this newsletter, all feedback is welcome!

Contact Us

Martin Sanford (SBIS Manager) email: martin.sanford@suffolk.gov.uk, tel: 01473 433547

Gen Broad (Biodiversity Officer) email: gen.broad@suffolk.gov.uk, tel: 01473 264308

Jane Mason (GIS Officer) email: jane.mason@suffolk.gov.uk, tel: 01473 433571