

Summer Update July 2017

News and Partner Updates

Peat Restoration Fund

The <u>announcement of the fund</u> opening was made on 21st July. Closing date 20th November. The FFTF meeting in September will be used to discuss the fund criteria and possible potential projects that partners have in mind that could be put forward.

"Funding will be made available for schemes that restore upland and lowland peatlands, create habitats for vulnerable wildlife, reduce flood risk by slowing rain water flow and increase carbon capture.

Bids with the greatest potential for greenhouse gas mitigation and projects that deliver better value for money and maximise environmental benefits will be favoured. The scheme is for capital works and is open to everyone outside central government and their agencies."

On the same day Secretary of State Rt Hon Michael Gove MP set out his <u>vision on the future of our natural environment</u> which gave hope for continued support for the environment with mention of the Fens.

Extract from speech: "In some areas a combination of heavy machinery, irrigation methods accelerating erosion and a determination to drive up yields has meant that soil has become less productive. It is not only less effective at sequestrating carbon it is, progressively, less fertile. The effect is most noticeable in what has been some of our most fertile growing soil, in the Fens, where a combination of the draining of the peat and the disappearance of hedges and trees over the years has led to a thinning of productive earth. According to the Committee's report, Britain has lost 84% of fertile topsoil since 1850 and the erosion continues in some areas at between 1cm and 3cm a year."

Development of a Cambridgeshire Fens Biosphere Reserve

(Catherine Weightman, Natural England)

The productive Fenland landscape, rich in wildlife, history and tradition is on the frontline of a changing climate. This raises significant challenges for people and wildlife that will require a delicate balancing act for both to remain resilient and flourishing.

By establishing a UNESCO Biosphere Reserve is maybe a basis for such a lasting partnership to protect and enhance the landscape and help ensure it achieves it potential as a model of sustainable development. https://www.unesco.org.uk/designation/biosphere-reserves/

Open discussions have been held with key partners and so far no concerns that cannot be addressed have been raised. The nomination process seems to take a couple of years and a dedicated project officer seems invaluable. To peruse this designation a small HLF project has been submitted by Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trust to HLF for £10,000 to enable the development of a larger bid to enable capacity to complete a biosphere nomination form.

Fenland Flora Project Owen Mountford and Jonathan Graham - http://bsbi.org/fenland

The Fenland Flora survey is now in its closing stages, and we expect to complete the field work in 2018. Almost all recorders from the Botanical Society of Britain and Ireland (BSBI) have transferred their Fenland data to us, and there are now under 150 tetrads with fewer than 100 species recorded - many of which are only fragments or are areas of salt-marsh, where the total flora may well be under 100 species. Joint meetings have been held with county Flora Groups for Cambridgeshire, South Lincolnshire and Norfolk. We expect to complete the transfer of national Biological Records Centre data in 2018 and to focus our fieldwork that year on species for which Fenland is a key area. The survey has not only confirmed the importance of well-known sites in Fenland such as the Nature Reserves and the washlands of the main rivers, but also shown the botanical value of places such as the South Lincolnshire Fens, the Whittlesey region and the transition from Fenland to Breckland among numerous others.

The Fens for the Future Partnership have contributed £500 to the project to help support volunteer travel costs.



Early Marsh Orchids, Nene Marshes@Jon Graham



Cut Off Channel ©Owen Mountford

Wicken Fen Wildlife Report 2016 – National Trust June 2017

Extract from the newsletter- In 2016, Natural England commissioned two professional surveys at Wicken, as part of a wider project investigating the fauna of fenland sites. One survey investigated aquatic habitats and the other scrub edge habitats and these found both rare fen species and some new for the NNR.

Overall, at least 37 species were added to the species list for Wicken Fen nature reserve, both scarce species and more common, widespread species, perhaps spreading to the much larger area and range of habitats offered by the National Trust at Wicken. Given that we have a species list of over 9,000 species, adding 37 more is quite an achievement.

It is still possible to add a few plant species to the lists, as these two records shows. Both common species are new to the Wicken Fen vascular plant list!

Red Campion (Silene dioica): This very common species was added when a few dozen plants were found by Stuart Warrington on 16/06/2016 on the south-facing bank of Wicken Lode near Verrall's Fen (TL545696).

Hoary Plantain. (Plantago media): Discovered by Maddie Downes at the Reach24 site (TL569663) during the Bioblitz on 3rd July 2016. It prefers the calcareous soils and open grassland habitat prevalent at Reach.

Link to Wicken Fen Wildlife Newsletter

New Life on the Old West project development (Cambridgeshire ACRE)

At Cambridgeshire ACRE, with expert input from a large number of organisations and individuals, we are now in the final stages of preparing our stage 1 bid to the Heritage Lottery Fund. We are targeting the Heritage Grant scheme and working towards the deadline of 21 August. If successful, we should be able to distribute around £700,000 of HLF funding, during the 2018 development phase and 2019 – 2022 delivery phase.

This project has been shaped following the success of the Ouse Washes Landscape Partnership scheme which sadly has come to an end recently (see www.ousewashes.org.uk for a number of legacy resources).

The ultimate aim of the New Life on the Old West project is to work towards "A More Resilient Fenland Landscape by enhancing natural heritage connectivity across its largely arable landscape and connecting local people with their green space assets". Through a combination of small-scale wildlife-friendly improvements on the ditch network and arable landscape, and a variety of interventions on community green spaces, combined with a varied education, volunteering (including citizen science) and engagement programme we hope to provide real benefit to the biodiversity and communities in the landscape either side of the Old West River and, in the process, implement a vital aspect of the Fens for the Future Strategy on landscape-scale connectivity in the landscape in between two, expanding core areas (National Trust's Wicken Fen and the RSPB's Ouse Fen).

If you would like to know more, please contact Mark Nokkert at mark.nokkert@cambsacre.org.uk or 01353 865030, check out our WordPress site, www.newlifeontheoldwest.wordpress.com or follow us at Facebook (@newlifeontheoldwest) or Twitter (@NewLifeOldWest).

Black Godwits Project (RSPB, WWT), Website link

Extract from website- Project Godwit focuses on two wetland sites in the east of England – the Ouse Washes and Nene Washes. Here conservationists are aiming to grow the black-tailed godwit population by enhancing godwit habitat and trialling methods to increase productivity. In June the first of the headstarted chicks were released into the wild at WWT Welney. The "class of 2017" have all been fitted with their own unique set of colour rings so that they can be followed after their release. This group all received a green colour ring above a lime colour ring with the black letter "E", on the right leg, above the knee. Two additional colour rings on the left leg above the knee, complete the combination. We're appealing to bird watchers to help us keep track of the birds after their release. If you see a colour ringed black-tailed godwit, please let us know about it! You can report it to us on our sightings page here https://projectgodwit.org.uk/get-involved/report-a-sighting/

The hope is that the birds will join post-breeding flocks of wild black-tailed godwits, before starting their southerly migration to the wintering grounds in Spain, Portugal and West Africa.



One of the class of 2017 (Bob Ellis – WWT)



Exploring their new home (Bob Ellis – WWT)

In two-year's time, the expectation is that the released birds will return to the Ouse Washes to breed, boosting this fragile population, where we have been working to create safe, flood-free habitat for them. You can read more about the godwit's release, and the likely places the birds could be spotted next on the wadertales blog here: https://wadertales.wordpress.com/2017/06/13/special-black-tailed-godwits/

NERC Industrial CASE Studentship (Natural England)

The Studentship bid was successful and will start in September. The University of Aberdeen (Dr Lesley Lancaster) supervisor) will lead the project, with Natural England (Dr Humphrey Crick and Catherine Weightman) as the non-academic partner organization. Calum Anderson has been selected for this PhD. As this project progresses partners will be invited to input and help steer the research. The title of the PhD is 'Population connectivity of native and invasive species in the Fens: what are appropriate habitats for conservation?'

The project's overarching aims are:

A) to develop a novel, adaptable analysis pipeline and platform to evaluate how fragmentation and subsequent creation of dispersal corridors alter the effective movements of native and invasive wetland species, taking into account unique movement patterns in aquatic species and environments.

- B) to evaluate a set of proposed restoration plans for the Fens, in order to determine the most cost-effective approach to improving connectivity for native species while not promoting the spread of invasives.
- To achieve these aims, the student will apply a joint landscape genetic and individual-based modelling approach, gaining transferrable skills in these in-demand research techniques.
- 1)The student will develop a set of realistic species movement maps for the Fens. This portion of the project will rely on microsatellite marker development, analysis of population genetic data for population network structure and dispersal, and landscape genetic analyses of spatial patterns using GIS-based data.
- 2) The student will also develop predictive modelling scenarios for future species movement trajectories under proposed placement of dispersal corridors and stepping stone habitats. For this, the student will be trained as a co-developer of 'RangeShifter', state-of-the-art software developed by the Travis group and already used to inform terrestrial connectivity planning.

Other projects involving the Fens

The DRY Project- (Drought Risk and You) is exploring how science and narrative can interact in drought-risk decision-making. http://dryproject.co.uk/, follow the project @Project_DRY or contact us by emailing DRY@uwe.ac.uk.

Debating Natures Value (Website Link)

This project, which is funded by the Arts & Humanities Research Council, is led by Dr Rupert Read from the University of East Anglia and Prof Aled Jones from Anglia Ruskin University.

It will create a dynamic network of experts and stakeholders - from artists, academics and practitioners, to campaigners, policy makers and business people – to collaborate and debate the issues around natural capital.

Focusing initially on the East of England, the debates will have wider implications for the way nature is valued across the UK and beyond. The workshop and discussions hosted by the Network will engage with current discourse and inform policy going forward.

The legacy of the two-year project will include policy proposals and a bank of resources. The project will culminate with a joint conference and art exhibition in 2018.

Read the project's first thinkpiece in full, setting out the projects aims and intended outputs, as well as some key issues for network members to engage with

Future land scenarios workshop: comparing land sparing and land sharing in The Fens

David Attenborough Building Cambridge - 12th July 2017

Roger Mitchell attended this workshop on behalf of the Fens for the Future Partnership along with staff from the RSPB, and the Middle Level Commissioners. The workshop was led by project team members from the RSPB, University of Cambridge and University of Bristol.

The project is investigating whether the balance between food production and biodiversity can best be met through wildlife-friendly farming ('land sharing') or high-yield farming combined with the protection of land for wildlife ('land sparing'), or a combination of the two. Professor Andrew Balmford explains the concept of land sharing/sparing on the video at this link: https://youtu.be/zTVC32Bfl-U

The project focuses on birds which certainly respond best in terms of numbers to land sparing. In addition to the food/wildlife trade-off, the project will also explore the consequences of different land-use scenarios for (at least) two other ecosystem services: greenhouse gas storage and human recreation. The Fenland focus is the remaining peat soil fen and they are also undertaking a similar, comparative study on Salisbury Plain.

The workshop tackled several questions which are directly relevant to the Fens for the Future partnership, such as: Could the area of the farmed landscape change and what limits this? How much restoration of natural habitats, and of what kind, is possible? What could the land cover of The Fens look like by 2050?

Notes from the workshop and a copy of the slides used were promised, and these will be circulated to partnership members in due course. The project team are also willing to give a presentation at a Fens for the Future meeting, possibly that on 22nd September to be held in Cambridge.

Pollinator forage in the Fens: A prickly problem

Hilary Conlan, Post Graduate Research, Anglia University, (Hilary.conlan@pgr.anglia.ac.uk)

My Phd is focussed on the importance of the agricultural drains as a resource for pollinators. While many people know about the decline of bees and are willing to plant garden flowers for bees, few are aware that flies, such as hoverflies, are major contributors to pollen transfer. Our drains support the larval stages of many hoverfly species and the drain banks provide the stable land for wild flowers. I have seen the heavy use pollinating insects make of the nectar available in creeping thistle but know what a detrimental weed it is for the farming community. I am aiming to suggest ways in which the drain banks could be enhanced for pollinators without requiring a change in the current management or expensive schemes. I hope to be completing the write up stage of my PhD in Autumn and will be looking to set up further experimental sites to look at the long-term effect of my suggestions. It is hoped this work can be part of the 'New Life on the Old West' project with the aim to increase flowering plants on the drain banks. We are hoping to obtain EA agreement to use the stretch of banks on the Old Wash between Stretham and Earith."

Flag Fen and Must Farm Archaeology – Future plans (Sarah Wilson, Vivacity)

The Must Farm archaeology is now in the post-excavation phase, with the artefacts removed from site and the area back-filled and handed back to the owners of the quarry.

During the first half of 2017 specially appointed consultants, Metaphor, were asked to assess and report on the optimum location for the Must Farm archaeology, and how the finds would best be presented for the benefit of Peterborough as a whole, with reference to Flag Fen in particular, Fenland and the landscape of the fens in general. The consultants have only recently presented their final report and have suggested a solution which is currently being worked-up into a project, to be taken to funding bodies over the next 6-9months. We have received guidance from organisations including Historic England, the British Museum and The University of Cambridge, and although not yet able to fully publicise our proposals, we are certainly forging ahead to provide the best and most appropriate opportunities we can for Flag Fen.

https://www.vivacity-peterborough.com/heritage/flag-fen/discover-the-must-farm-boats https://www.vivacity-peterborough.com/vivacity-venues/flag-fen/

Water Resources East – report by Anne Ramsey, Natural England

Trade off workshops in early May

Ian Butterfield and I attended a 2 day workshop to consider the portfolios of options available and the trade offs between sectors needed. It was well attended by a variety of stakeholders from the water industry, energy sector, Agriculture and environmental bodies. There was a good sense of collaboration and working to a common goal of sustainable water resources for the 2040's and beyond.

Development of the vulnerability assessment in June

Following the trade off workshop the consultants undertook a Baseline Vulnerability assessment under the fully functioning model which includes a groundwater element. The Technical steering group worked together to understand the vulnerabilities of the system as well as the metrics against which the portfolios of schemes are being assessed against.

Portfolio Selection in August

The technical steering group are meeting mid-August to agree on the preferred portfolios of options to go forward into the draft plan which is due in September.

I believe this project is progressing well and is an excellent example of co-creation of a strategy which is in line with NE's C21 innovative ways of working, collaboration with solutions which will aim to develop natural capital.

NERC Knowledge Exchange Fellowship (Natural Capital and Healthy Local

Economies) - Charlie Stratford, CEH

Last year I was awarded a NERC Knowledge Exchange Fellowship to focus on supporting the dialog between Local Nature Partnerships (LNPs) and Local Enterprise Partnerships (LEPs) using the relevant data, tools and techniques resulting from NERC-funded science. The fellowship formally commenced in January and I have spent the first 6 months meeting with representatives from LNPs and LEPs and their partner organisations. The aim of this initial phase is to map where particular successes or challenges in communicating the value of the natural environment between these two groups are occurring and to understand the reasons why. At the same time, a series of discussions with NERC-funded researchers is being held to understand the opportunities for application of relevant research. Subsequent phases will involve focussed working with a subset of stakeholders to better understand and communicate natural capital and then sharing the experience of this at a national scale.

If this work is of interest to you then I would be very interested in hearing from you. Please feel free to email Charlie Stratford: cstr@ceh.ac.uk.

Events and Activities coming up

Must Farm Exhibition- The story so far (website link)

Date: On until September 10th

Location: Peterborough Museum (free except on special event days)

BogFest - http://www.iucn-uk-peatlandprogramme.org/bogfest

Date: 21 Sep 2017

Location: Moorlands Field Centre, Edale, Peak District National Park

RSPB Lakenheath - <u>Website Link</u>

Great Fen - <u>Website Link</u>

Welney Wetland Centre - <u>Website Link</u>

Fens for the Future Partner Updates July 2017

RSBP Fen Drayton Lakes - Website Link
Wicken Fen - Website Link
Willow Tree Fen - Website Link
www.fensforthefuture.org.uk
Contact web admin if links are broken

Fens for the Future Meetings

<u>Friday 22nd September</u> Meeting at the David Attenborough Building, The David Attenborough Building, Pembroke Street, Cambridge, CB2 3QZ

http://www.conservation.cam.ac.uk/sites/default/files/file attachments/David Attenborough travel guide.pdf

Site Visit to Fens Drayton (RSPB) https://www.rspb.org.uk/reserves-and-events/find-a-reserve/reserves-a-z/reserves-by-name/f/fendraytonlakes/index.aspx

Suggest people park at St Ives park and ride at 9:15 ish, travel on the bus to Cambridge, pretty frequent bus service, or park at Fen Drayton and get the bus into Cambridge.

https://www.rspb.org.uk/reserves-and-events/find-a-reserve/reserves-a-z/reserves-by-name/f/fendraytonlakes/

Friday 1st or 8th December, TBC. Meeting at Natural England Offices, Peterborough

AOB

Not just for Scientists – Climate change projections,

Olly Watts (RSPB) Blog Post I'm working with the Met Office on new climate change projections for the UK, due next spring. A version of this post appeared in the project team's newsletter.

FFTF Partners took part in a RSPB Climate change workshop in November 2015. The feedback is on the FFTF website.

Job Advert for Research Assistant in Agriculture and Water (Catchment Officer)' at Lincoln University