

# **News and Partner Updates**

#### Water Works

Is the name given to a visionary project funded by the People's Postcode Lottery Dream Fund.

Water Works will be delivered over a two year period 2019-2021 by a partnership led by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, working with partners Cambridgeshire ACRE, and the University of East London (UEL) and specialist contractors such as the Centre for Ecology and Hydrology (CEH) and Micro Propagation Itd.

Water Works is all about sustainability; creating a sustainable system of wet farming (paludiculture) and transforming how people work together within a UNESCO Fens Biosphere – a global accolade and recognition of sustainable development

The <u>Water Works</u> project is in two parts: **Fens Biosphere** and **Wet Farming** on the Great Fen. Cambridgeshire ACRE is delivering the Fens Biosphere and The Wildlife Trust BCN is delivering the Wet Farming at the Great Fen with the other partners mentioned.

**The Fens Biosphere:** the two years will be spent gathering the information and support necessary to apply for UNESCO Biosphere status, at the same time developing a portfolio of projects to deliver post-designation and identifying potential funding. In December 2019 there will be a networking event and in March 2020 a launch event. For more information see the website: <a href="https://fenlandbiosphere.wordpress.com/blog/">https://fenlandbiosphere.wordpress.com/blog/</a> or contact <a href="mark.nokkert@cambsacre.org.uk">mark.nokkert@cambsacre.org.uk</a> or <a href="mark.nokkert@cambsacre.org.uk">Rachael.brown@cambsacre.org.uk</a>.

Link: Map of Biosphere Area, with thanks to Naomi Stevenson for producing the map

**Wet Farming:** Will create more sustainable systems for arable farmers through developing crops that grow in wet conditions, protecting peat soils, reducing CO2 emissions, cleaning water, benefiting wildlife, sharing knowledge and creating new opportunities for farmers and growers.

Plans are underway to prepare the land; crops are being identified and the monitoring and evaluation is being established. There will be a range of "show and tell" and other events to engage farmers and other interested parties.

For more information see the websites: <u>https://www.wildlifebcn.org/news/water-works</u> and <u>http://www.greatfen.org.uk/news/wetland-farming-trials-great-fen-0</u> or contact <u>Lorna.Parker@wildlifebcn.org</u> or <u>Kate.Carver@wildlifebcn.org</u>

# Doubling Nature – Natural Cambridgeshire (Local Nature Partnership for Cambridgeshire and Peterborough)

On Monday 29th July, Natural Cambridgeshire, the local nature partnership, announced ambitious plans to double the area of rich wildlife habitats and natural green space across Cambridgeshire and Peterborough with the aim of creating a world-class environment where nature and people thrive, and businesses prosper.

The ambition has been drawn up by the partnership, including local authorities, statutory agencies, conservation charities, housing developers and community groups. It was launched by Tony Juniper, Chair of Natural England and James Palmer, Mayor of the Cambridgeshire and Peterborough Combined Authority, at separate events at Waterbeach Barracks and the Hamptons Peterborough, both outstanding examples of how high-quality housing development can deliver new areas of nature rich landscape. Cambridgeshire currently has one of the smallest areas of land managed for nature and green space of any county in the country, relative to size. Natural Cambridgeshire wants to double that figure, from 8% to 16%. Contributions to this doubling will depend on initiatives in the fens including Wicken Vision, The Great Fen, New Life on the Old West, new agri-environment schemes and, hopefully soon, under the promoted sustainable development influence of the UNESCO Fenland Biosphere Reserve.

Links: Launch Document | Media Release Document

Natural Cambridgeshire Website: <u>https://naturalcambridgeshire.org.uk/</u> Cambridge Conservation Forum (CCF) Website: <u>http://www.cambridgeconservationforum.org.uk/</u>

## **East Anglian Fens Lowland Peat Pilot**

Defra are supporting 5 peat pilots led by Natural England, 4 upland and one lowland, East Anglian Fens, to be completed by March 2020 and to feed into the Defra Peat Strategy. Catherine Weightman is leading on the East Anglian Fens pilot, so please contact her for further information. Catherine.weightman@naturalengland.org.uk

The Issues:

- The CO2 loss from lowland farming on the peat soils is far greater than the uplands but the focus on lowland peat loss has been limited, the scale and urgency of the problem has to be accelerated.
- 33.9% of CO2 emissions from farming in the UK comes from East Anglian peat soil contributing massively to climate change gas emissions.
- 2cm of peat soils are lost every year in the fens
- Although it covers less than 4% of England's farmed area, the Fens produces more than 7% of England's total agricultural production, worth £1.23 billion less than 50 years of peat remain.
- Existing landscape scale projects (e.g. Great Fen, Wicken Vision, Willow Tree Fen, Ouse Fen) are transforming arable land to fen and wet grassland landscapes, but the actual area of these projects is having very limited impact, if any on reducing CO2 emissions in the wider fenland area.

#### Aims:

Duality of approach between promoting and developing existing good management of peat soils and looking at new systems of maintaining the peat resource.

What the pilot will do:

- Work with academics to ground truth data on remaining peat resource.
- Verify the comparisons of CO2 loss from lowland farming to upland systems
- Work with the Great Fen project to disseminate information on the paludiculture trials

- Develop ten point plans for key tenant/owners groups on what they can do to preserve the peat soil
- Gain buy in from the agricultural sector to secure their ideas on current and potential good practices and to understand the blockers
- Inform proposed and future ELM trials including in the South Lincolnshire fens facilitation fund and Fens Nature Friendly zones
- Look at measures IDBs can put in place to promote sustainable agriculture.
- Support development of realistic objectives for sustainable land management and thereby inform a candidate UNESCO biosphere reserve in the Cambridgeshire Fens.
- Host a conference for stakeholders in early 2020 to share findings from this pilot and experiences elsewhere on lowland peat restoration.

## The South Lincolnshire Fenland Partnership Amanda Jenkins

**The Fenland Farmers Facilitation Fund** is continuing to meet, and the group is growing rapidly of late. The group took part in the GWCT farmland bird count in February 2019. Initially meeting at Vine House Farm where Nicholas Watts and Roger Wardle discussed CS options to benefit farmland birds. Following this meeting each of the farmers teamed up with a local bird expert to count birds on their own farm. Results were submitted to the GWCT count. Afterwards we met in the local pub to discuss the programme for the coming year. The June meeting was a well-attended workshop at Thurlby Grange Farm looking at beneficial management of soils. Dr David Jones from the Natural History Museum gave a very interesting & entertaining talk on earthworms, following a lovely lunch Tony Reynolds took the group out to demonstrate the advantages of no-till farming (aka conservation agriculture) on soil quality and yield.

Lesley Sharpe has taken over as group facilitator whilst Roger Wardle is recuperating from illness and surgery. We all wish Roger well and look forward to his return to the fens.

**ELMS Tests & Trials Visit** - DEFRA chose the Fenland Farmers facilitation group to begin discussions on the way forward for the new Environmental Land Management Schemes (ELMS). This will replace the current Countryside Stewardship Scheme. The first meeting in February 2019 was a fact-finding visit, discussing what farmers would like to see in the new ELMS scheme. The second visit in June was a more detailed discussion on how farmers would like schemes to be incentivised and delivered. Discussions were lively and interesting, and the farmers welcomed the opportunity to have a say in the new scheme.

Assoc. of Drainage Authorities Workshop on pollinators – was held at Willow Tree Fen in July 2019. The Environment Agency (Fisheries Biodiversity and Geomorphology Team) is investigating how they can manage their watercourses and assets for biodiversity benefit, particularly for wild pollinators. As the Internal Drainage Boards have comparable assets and watercourses, they were keen to consider how they might undertake similar management. It's worth noting that many internal drainage boards already undertake beneficial management on their watercourses, helping to make the fens such a fantastically biodiverse area. It's important to highlight this existing good work and continue to work together to deliver for people and wildlife across the fens.

**Fascinating Fens - James Sutton** a Lincolnshire based artist has been appointed to deliver a piece of fenland inspired artwork at Willow Tree Fen nature reserve. He will be working with local groups and communities to create and fabricate the artwork. This project is expected to run until the end of 2020. If you are part of an art or other interested group in the Bourne, Spalding or Market Deeping area and would like to be involved, please contact the South Lincolnshire Fens project Officer at <u>slincsfens@lincstrust.co.uk</u>

**Osprey Platforms** - the Lincolnshire Wildlife Trust's Bourne Area Group have been working with the South Lincolnshire Fenlands Project Officer, the Rutland osprey team, local Farmers, internal drainage boards and Western Power to create osprey nest platforms in the area. Ospreys passing through the South Lincolnshire fens on their annual migration are being encouraged to stay longer and hopefully breed. Platforms are being constructed on farmland in the area to complement an existing platform at Deeping Lakes nature reserve.

**Community Workshops at Willow Tree Fen** - Over the past two years we have held community workshops at Willow Tree Fen Nature Reserve. This is to encourage people to come and enjoy the beautiful fenland landscape, understand a little about the history of the fens on their doorstep and carry out and learn practical tasks that help to make a difference to their local environment. We have benefitted from Lincolnshire County Council Community Wildlife Grants to fund these events. They have included heron nest basket weaving and a Mudman workshop for children last year and a Bogs 'n' Bugs followed by a Weeds 'n' Seeds workshops this year. These were organised and run by Jim & Joel Ashton, aka the Butterfly Brothers local, wildlife experts and landscape gardeners who featured in the recent wildflower meadows episode of Gardeners World.

Following on from the Bogs & Bugs and Weeds & Seeds Workshops, one local community group has taken up the opportunity to make their areas more pollinator friendly with a couple of big bug hotels and some insect friendly herbs and garden plants in their barbecue area. They are considering creating a meadow near their newly planted apple orchard. Schools and other groups in the area have contacted the project officer to work on wildlife friendly projects in their grounds.



Heron Nest Making | Photo: A Jenkins



Bug Hotel Building |Photo: A Jenkins

#### Future work -

#### Nature Improvement to Nature Recovery

In 2017, the partnership hosted a well-attended community meeting to apply for Nature Improvement Area (NIA) status for the South Lincolnshire Fenlands. The participants overwhelmingly voted to apply for this non-funded status to help draw attention to the unique fen landscape and biodiversity in south Lincolnshire. New NIAs were not maintained in recent government environment policy, so we will explore opportunities to create a Nature Recovery Network in the South Lincolnshire Fens area.

#### Minerals

After narrowly missing an opportunity to purchase a local restored gravel mineral reserve, the partnership hopes to work with the Mineral Products Association to deliver a workshop for the minerals industry. Through this we hope to consider how we can deliver long term, wetland and fen focused restoration to benefit people and wildlife in the South Lincolnshire Fenlands.

#### **Partnership Steering Group**

The South Lincolnshire Fenlands Partnership Steering group continues to meet regularly and now has representatives from all the local parishes and local county and district councillors. It provides great opportunity to spread the message locally about the partnership aims to create of wetlands for people and wildlife including, protecting and enhancing the natural and historic fenland environment, extending and improving access to green and blue spaces, building resilience to adapt to change and promoting environment and business within our local communities.

#### NERC Industrial CASE Studentship, Calum Anderson

I am a PhD student with the University of Aberdeen investigating patterns of connectivity across the Fens for freshwater invertebrate species and how the ditch network might facilitate or hinder dispersal of freshwater animals across agricultural areas between remnant fenland patches.



I conducted a season of fieldwork last year to determine the distribution of freshwater invertebrate species across major biodiversity hotspots of the

Fens, including at Wicken Fen, Woodwalton Fen and Chippenham Fen NNRs. From the samples taken I found that the beetle population across these reserves tends to be dominated by a small number of species known to be capable of long-range movements by flight, which might be expected across such a fragmented landscape as the remnant wetland of The Fens. I have also been using a dispersal-modelling software RangeShifter to simulate how freshwater species might use drainage ditches as a method of moving through agricultural areas to migrate between habitat patches, such as meres or fenland rushes. Thus far the results suggest that while water-filled ditches can offer aquatic animals a set of corridors to facilitate dispersal between habitats, they can also form a labyrinthine structure that actively suppresses successful dispersal by misleading and trapping dispersing individuals with junctions and dead-ends that lead them further away from desirable patches of habitat.

I am currently undertaking another season of fieldwork with the aim of gathering a number of beetle and gastropod species from the various biodiversity hotspots of the Fens in order to conduct a landscape genetics study. It is my hope that by analysing the genetic divergence of individuals taken from different NNRs I can infer the migration rates of several species between the various fenland nature reserves of the area, indicating which reserves might be most isolated and which are most wellconnected.

Contact: c.anderson.17@abdn.ac.uk

#### **Net Gain** Article from the Natural England Quarterly Newsletter July 2019

Biodiversity net gain is an approach to development or land management which leaves the natural environment in a measurably better state than before.

Government consulted on making biodiversity net gain mandatory for all developments (bar permitted development and house extensions) under the Town & Country Planning Act, using an updated Defra Biodiversity Metric. The consultation closed on the 10th February. In his <u>Spring Statement</u> on the 13th March the Chancellor of the Exchequer announced in the House of Commons that Government intends to



proceed to make biodiversity net gain mandatory. This was a very welcome announcement. We do not yet know the details but Natural England will be working with Defra to help take forward mandatory biodiversity net gain via the Environment Bill.

In the meantime, Natural England will be releasing an updated version of the Defra Biodiversity Metric (coined the Biodiversity Metric 2.0) later this Summer. Developed in partnership with the Environment Agency and with advice from industry and planners, Metric 2.0 will be freely available and will come with detailed guidance. Metric 2.0 is a significant advance on the original Defra metric. Once released we would welcome feedback from users.

Natural England also welcomed the publication in January 2019 of the <u>Biodiversity Net Gain – Good</u> <u>Practice Principles for Development</u> by \*CIRIA/CIEEM/IEMA. Natural England was involved in the development of this guidance and accompanying case studies.

\*CIRIA: Construction Industry Research and Information Association, CIEEM: Chartered Institute of Ecology and Environment Management, IEMA: Institute of Environmental Management and Assessment

## Natural England's Eco-metric Natural England Quarterly Newsletter July 2019

The <u>25 Year Environment Plan</u> highlights the opportunity to expand the net gain approaches used for biodiversity to include wider natural capital benefits and sets out the ambition of embedding an Environmental Net Gain (ENG) principle in development.

Natural England has been working with Defra and a consortium led by the University of Oxford to develop an eco-metric for measuring the wider natural capital benefits for people and places from Biodiversity Net Gain (BNG). The recent <u>Defra consultation</u> focuses on mandatory biodiversity net gain, with the eco-metric identified as a potential future mechanism for making the transition to natural capital and environmental net gains in a way that is underpinned by BNG.

Natural capital tools can lack transparency and often don't capture the value of biodiversity. The ecometric will be a consistent, transparent, freely available tool for measuring natural capital losses and gains, specifically ecosystem services, in land use change/development scenarios. Critically it is biodiversity led, with biodiversity net gain a pre-requisite of applying the tool.

The eco-metric measures 18 ecosystem services - services provided by nature - including: water and air quality regulation, soil erosion, carbon storage and flood regulation. The eco-metric also measures cultural services such as recreation, access to nature and sense of place along with provisioning services like water supply and food production.

The eco-metric is based on an expert scoring approach that assigns scores for the ability of each habitat to provide these services. Scores are modified by multipliers to reflect the influence of habitat condition and spatial location on the delivery of ecosystem services, as well as the time taken for habitats to deliver these services.

We have recently undertaken quick turnaround testing in 20 pilot areas including large and small land management projects across England. These pilots have tested at what stage in the life cycle of a project or plan the eco-metric tool can be best applied, its potential to inform the site choice and design of scheme green infrastructure, its potential to strengthen the business case for investment in biodiversity and natural capital by demonstrating benefits for nature and people. Over the next six months we will be evaluating the findings and plan to publish a beta version of the tool in early 2020. When fully tested, we aim to bring together the biodiversity metric and eco-metric into one platform for simplicity of use.

A recent webinar on the eco-metric (April 2019) is available. For more info contact Clare Warburton

## Other projects involving the Fens

Cambridgeshire Geological Society (Chris Donnelly, <a href="https://www.wildlifebcn.org/">https://www.wildlifebcn.org/</a> )



Photo | www.cambsgeology.org

#### Update on the Fen Edge Trail

The Fen Edge Trail is a landscape heritage project co-ordinated by Cambridgeshire Geological Society. It links the Cambridgeshire border with Lincolnshire to the border with Suffolk, and also includes walks around the edge of the fen islands in the county. The aim of the project, in addition to producing descriptive leaflets highlighting geological, ecological and cultural interest in each area, is to involve individuals and community groups in looking at the landscape history of the Cambridgeshire Fens and generally promote the heritage of the area.

The fifth walk in the series has now been published and can be downloaded from the website <u>www.fenedgetrail.org</u>. Several other walks are in preparation and some are due to be published later this year. CGS are still looking for partners in some areas of the Fen Edge and welcome contact from any groups or individuals who would like to contribute to the project in some way. Talks and a display are available and can be adapted to particular areas.

Contact us, if you would like to be involved info@cambsgeology.org Link: http://www.cambsgeology.org/

## New Life on the Old West project update (Cambridgeshire ACRE)

Cambridgeshire ACRE wishes to thank the Fens for the Future Partnership and its many partners for their very supportive Letters of Support for the New Life on the Old West project. Following a short extension to the Project Officer's contract, the stage 2 submission is currently still being worked up by other Cambridgeshire ACRE staff, and we have now also re-recruited Geoff Gilfillan (started late June).

Due to the new rules under the National Lottery Heritage Fund's Heritage Grant, the stage 2 submission is now also competitive and one now only gets one chance to submit it. Cambs ACRE is careful to make sure it will be the best possible submission and is therefore still working on sharpening up several aspects of the submission. Although we are getting really close to getting it right, we have decided to go for a later submission date- November 2019.

We are still very committed to the project and just want to make sure we have the best possible chance of obtaining the delivery phase monies, so this partnership-led landscape-conservation work can take place from 2020 to 2023!

# **Events and Activities coming up** Fens for the Future Meetings

<u>Monday 23rd September</u> - Venue – The Great Fen Wildlife Trust Countryside Centre, Chapel Road, Ramsey Heights, Cambridgeshire, PE26 2RS, The site visit will be around the Great Fen The meeting focus will be on Peat. Our guest speaker will be Judith Stuart from Defra

## Late November Meeting – partners suggestions and offers of venue are invited!

IUCN Conference: Peatlands: Investing in the Future, 1st - 3rd October 2019, Belfast Weblink for information and ticket sales

## Cambridge Conservation Forum Autumn Symposium – 2 October 2019

**Call for presentations** -The Cambridge Conservation Forum are inviting anyone who would like to speak about their work to get in touch! Our Autumn Symposium will be taking place on 2 October 2019, and CCF organisations and individual members are encouraged to present about recent conservation projects and topics that will be of interest to other CCF members. There will be a mix of short presentations, breakout discussions and networking opportunities. Including presentations on the Fens; of the proposed Fenland Biosphere Reserve and the work of the Local Nature Partnership

To book to attend the symposium, contact: Holly Griffin UNEP WCMC holly.griffin@unep-wcmc.org

#### **Greater Lincolnshire Nature Partnership Annual Conference**

Drivers of Change – making sense of new opportunities for nature

Booking is essential, email <u>events@glnp.org.uk</u> or call 01507 528384 to book a place. Date: 31<sup>st</sup> October 2018, Location: The Showroom, Lincoln | <u>GLNP Website Page</u>

Great Fen –<u>Website</u> | Wicken Fen - <u>Website</u> | Fen Edge Trails <u>Website</u> | Willow Tree Fen – <u>Website</u> Welney Wetland Centre - <u>Website</u> | RSPB Lakenheath - <u>Website</u> | RSBP Fen Drayton Lakes - <u>Website</u>

# **Reports and publications**

#### NFU Farming in the Fens Report 2018

https://www.fensforthefuture.org.uk/admin/resources/downloads/food-farming-in-the-fensweb.pdf Link to additional NFU reports on their website: <u>https://www.nfuonline.com/news/nfu-reports/</u>

The Greater Lincolnshire Nature Partnership (GLNP) 2018-19 Annual Review, Link to report

IUCN Peatland Programme – June 2019 Newsletter

European Innovation Partnership Newsletter July 2019

Natural Capital Committee Report - Advice to government on net environmental gain