

Broadland catch-up

Newsletter No.12 of the Broadland Catchment Partnership - April 2016

The Broadland Catchment Partnership (BCP) is seeking to address issues around water quality, water availability, flooding, wildlife habitat and recreation by joining up the management of land and water in the **Broadland Rivers Catchment** (see opposite).

The catchment includes the area that feeds water into the rivers Bure, Waveney, Wensum and Yare and out to sea at Great Yarmouth. The aim of this newsletter is to share relevant information on issues, evidence and activity. *Please send us articles.*

The partnership is involving communities, investor organisations, companies and farmers in working together to improve the catchment. If you want to join the partnership, have any queries, or wish to unsubscribe from this newsletter please contact:

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Project updates

Broadland Slow the Flow project complete

Our Slow the Flow project constructed eight rural sustainable drainage systems (RSuDS) across the catchment. These are low tech, low cost solutions that can improve the quality of run-off from fields, roads and urban development. These will act as demonstration sites and it is hoped they will encourage more widespread adoption across the catchment to mitigate against the extreme rainfall events that we are experiencing.



Saxthorpe - field corner bund and ditch. © Matthew Philpot

The Saxthorpe and Martham schemes were completed by the Norfolk Rivers and Broads and Internal Drainage Boards respectively in March 2016. Thanks go to all the IDB staff and all the respective landowners involved in the project for their co-operation and support throughout.

Water Sensitive Farming Project 2016-2018



Update: Alison Smyth has been appointed as an independent farm adviser by the Norfolk Rivers Trust to work in the Broadland Rivers Catchment.

Key objectives of the project include:

- Conducting a minimum of 75 on-farm advisory visits
- Installation of 15 silt trap-type interventions minimum
- Implementation of improvements to enhance soil and water quality over a minimum of 3000 acres
- Engaging with at least 1000 farmers
- Holding 1 knowledge exchange event per year
- Developing case studies on the benefits to farmers of implementing soil and water quality improvements.

The project will complement existing Catchment Sensitive Farming, Campaign for the Farmed Environment and Defra Sustainable Intensification Platform work to increase farm profits whilst improving the environment. It will support the promotion of soil enrichment, cover crops, disruption of tramlines, cultivations to reduce and prevent compaction, optimum tillage and relocation of high risk field gateways. A financial contribution towards soil sampling is being explored. Any farmers who are interested in a free confidential farm visit can contact Neil Punchard on 07900 266496.



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Research

Sustainable Intensification Research Platform (SIP)



SIP is a multi-organisation research programme, established and funded by Defra to collectively explore the opportunities and risks for sustainable intensification (SI), from a range of perspectives and scales across England and Wales. SIP is led by NIAB.



Counting worms at Morley

© NIAB

In autumn 2014 Morley Farms established 8ha of black oat and vetch cover crop. This was on a field following wheat and ahead of sugar beet. The motivation for this was to try and increase soil health by adding organic matter in the form of roots and shoots. The field was ploughed in February and sugar beet established at the end of March. The monitoring work was carried out by NIAB who made various assessments before and after ploughing - notably on 20th May 2015;

*** Water infiltration was 25% higher with a cover crop than without (water soaks into the soil quicker reducing run off and evaporation)**

*** 70% increase in worm population with a cover crop than without**

*** 600% increase in worm biomass with a cover crop than without (more worms that were much bigger)**

Whilst this is one field for one year the observations are very encouraging. This has prompted the farm to establish a larger area of cover crops in autumn 2015 with 3 different seed mixes. Look out for more results over the next year.

Find out more at about cover cropping and soil management at the NIAB TAG National Agronomy Centre (NAC) Open Day at Morley on 23rd June from 10am (last tour 1.30pm).

Booking is essential. Register online [here](#).

AHDB Soils Programme: Call for Research Partnership: Management for Soil Biology and Soil Health

AHDB, in collaboration with the British Beet Research Organisation (BBRO), has invited researchers to form a collaborative Research Partnership, which will be responsible for devising and implementing a new programme of research and knowledge exchange projects to address challenges identified for the UK agricultural and horticultural industries on the call theme “**Management for Soil Biology and Soil Health**”. New work will be funded to provide farmers and growers with guidance and better understanding of soil biology and key soil health metrics, which have been validated in the field, to improve management for soil health across a range of systems including arable rotations, grassland systems, as well as production systems for perennial crops. It is anticipated that the Research Partnerships will identify and exploit synergies with existing collaborations.

For further details about the call, including the Research Partnership approach and research priorities to be addressed, please refer to the [Call Specification Document](#).

Funding

Countryside Stewardship

[Applications](#) are now open for:

Mid Tier until 30 September 2016.

Higher Tier:

until 16 May 2016 for applications that include agri-environment options (with or without woodland support); application packs must have been requested by 30 April 2016 until 31 May 2016 for applications that include woodland support options only

A mid tier advice event is being held on 10 June 2016 at the Norfolk Show Ground, Coleman Room, Norwich, NR5 0TT. 10.00 -13.00. bookings@adas.co.uk.

Publications

Flood risk management plans published

The first cycle Flood Risk Management Plans have been published. These plans describe the risk of flooding from rivers, the sea, surface water, groundwater and reservoirs; and they do so at a river basin and a catchment scale.

The plans set out how Risk Management Authorities will work together, and with communities, to manage flood and coastal risk between 2015 and 2021. This includes measures and actions to manage the risk and improve resilience.

Flood risk management planning is an important part of a collaborative and integrated approach to catchment planning for water. The Environment Agency believes that these plans, and their link with the previously published River Basin Management Plans, will help us to move further toward this.

The plans are available on the GOV.UK website. You will be able to find flood risk management plans (FRMPs) [here](#).

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Organisational profile

Northumbrian Water's Water Efficiency Team



Northumbrian Water is the parent company of Essex & Suffolk Water that provides drinking water to parts of the east of our catchment.

Its reputation as the leading water company in the field of water efficiency was further enhanced at the 2016 Waterwise Water Efficiency Awards. The company was announced as winner in 3 categories and runner up in a further 2 categories at a prestigious event at the House of Lords on 1st March.

Winner:

- Bourne Leisure Holiday Home Retrofits - Business & Industry category
- H2eco Analysis project - Research & Evaluation category
- #watersavingselfie project - Innovation category

Runner up:

- Save-a-Bucket Load Gardening Campaign - Farming and Horticulture category
- Behavioural Economics Research - Research & Evaluation category



Water efficient caravan © Northumbrian Water

Business & Industry Category - Bourne Leisure Retrofits

Over the past three years a water reduction programme has been implemented at 4 of Bourne Leisure's key holiday resorts. Taking a 'whole-site' approach a retrofit of both the park's onsite communal building, and static caravans, was used to make them as water efficient as possible. This resulted in an impressive 12% reduction in water use, equivalent to 5.6 Ml/year.

Research & Evaluation Category - H2eco Research analysis

H2eco is the water company's home retrofit programme. Each year, it selects one town and every household is invited to take part. Qualified technicians audit a property and make any possible adjustments to leave the house as water efficient as possible. This may include converting a toilet to be dual flush, repairing dripping taps, fitting a new water efficient showerhead, providing a water butt and trigger hose. At the end of every year a detailed analysis takes place. This year it took an in-depth look at the 1.5 million records accumulated

since H2eco began in 2007. Not only did this research provide key improvements and learning points, it also identified that water savings were still evident several years after each project's close, invaluable information which has significantly added to the water industry evidence base.

More details about each of the projects can be found [here](#).

Project profile

Floating Fiend in the Waveney

In recent years, floating pennywort (*Hydrocotyle ranunculoides*) has become established as a high priority invasive species in the River Waveney.



Following an initial sighting at Scole Bridge in 2006, it can now be found concentrated in dense mats up to 10 miles east of Diss, including in drainage networks feeding the main river channel.

Floating pennywort © River Waveney Trust

The species can be free-floating or rooted (see identification photographs). It can grow up to 20cm per day in peak season and has huge potential ecological and economic impacts, including shading and out-competing native species, causing deoxygenation and impeding water flow.

Means of floating pennywort control have been facilitated by the Norfolk Non-Native Species Initiative in partnership with the River Waveney Trust and will continue into 2016, with the hope of complete eradication by 2018.



Dense mat of floating pennywort © River Waveney Trust

Riparian landowners are kindly asked to report sightings in the main river channel or associated ditches to the River Waveney Trust on 01986 893470. For more information click [here](#).

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Notifications

Flood Defence Consents to Environmental Permits



NFU briefing: [Conversion of Flood Defence Consents to Environmental Permitting Regulations \(EPR\)](#).



New rules have been introduced on how to apply for permission to

undertake works in or near main rivers. Previously a flood defence consent had to be applied for to undertake this type of activity; this has now transferred to controls under the Environmental Permitting Regulations (EPR). You should still apply to the Environment Agency (EA) to gain permission to do works in or near rivers under EPR.

Different Types of Permissions Under EPR:

- **Exclusions:** for the lowest-risk activities, which require no notification to the EA and have no charge;
- **Exemptions:** which must be notified to the EA in advance of the activity but carry no charge;
- **Standard Rules Permits:** That require application, and have a standard fee of £170;
- **Bespoke Permits:** For activities not covered by any of the above, which require application and a bespoke charge.

Previously under flood defence consents there was a flat-rate charge of £50 for applications. Under the new scheme, activities which fall under the scope and conditions of an exclusion or exemption are free of charge. Standard rules permits need to be applied for other types of larger scale activities. The current charge for a standard rules permit is £170 and bespoke permits will be considerably more.

NFU briefing: [Dredging of Main Rivers in England](#)

Following the Secretary of State's, Liz Truss, announcement at the Oxford Farming Conference on 6 January 2016, farmers under these new rules are now able to maintain up to **1.5km of 'man-made ditches, land drains, agricultural drains and previously straightened watercourses classified as main rivers'** under an exemption. The exemption must be applied for prior to the activity taking place but there is no fee. For other main river watercourses a stretch of up to 20m can be dredged under an exemption. It is important to understand the conditions which exist that determine when and where this dredging can occur.

This includes the condition that the dredging activity cannot occur within 5 km upstream of a site notified for its freshwater habitats that is designated as a Special Protection Area (SPA), Special Area for Conservation (SAC), Ramsar site, Site of Special Scientific Interest (SSSI), or Local Nature Reserve (LNR). The [Description of Exempt Activities](#) also includes an appendix of photographs for identifying *whether a main river watercourse qualifies as 'previously straightened' and the NFU encourages its members to consult this before proposing works to the EA.* Given the subjective nature of this

guidance, the NFU will be working with the EA to improve the guidance going forward. For any further questions on these changes, please contact Regional Environment Adviser, Rob Wise on rob.wise@nfu.org.uk or 07880 385684.

Events

SIG: A Sense of Place - Geomatics meets soils health

17th May 10am-3pm; Elmdonbury, nr Saffron Walden

Two parallel learning streams will run at this event. Growers will be able to attend a soils masterclass, while technology, software and sensor developers will be learning about ways to bring a geo-spatial focus to the information that can be gathered in the field. After lunch, both streams will come together to find out more about the opportunities for farmers to capture and use geo-spatial information about their soils, coupled with insights about the capacity for technology to meet these market needs. [Book here.](#)



Pollinator: Controlled Traffic Farming - A Direct Line to Healthier Soils?

26th May 4pm-8pm; nr Dereham, Norfolk

Controlled Traffic Farming (CTF) brings together a set of new enabling technologies which could underpin new ways of producing crops and managing the health of soils. You'll hear a case study first hand on CTF adoption courtesy of farm hosts N E Salmon, and we'll be learning from RTK Farming, technology innovators, how they developed GPS technology for this application. With a farm tour and a unique opportunity to understand the risk-benefit analysis behind investing in CTF, this Pollinator is your chance to see first-hand how CTF can make a difference to reducing soils compaction, increasing yields and reducing inputs, including comments from Ed and Robert Salmon, who will be sharing their insights behind the decision to invest in CTF. [Book here.](#)

Courses

[Training News](#) Apr - Jun 2016.

Train East: <http://www.traineast.co.uk/>

Dates of interest

10-12 May	IFM Farming and Fisheries Conference Rheged Centre, Penrith. Book here . Programme here .
9 Jun	BCP Steering Group meeting Dragonfly House, EA, Norwich: 10am-1pm.
10 Jun	Mid-tier stewardship advice Norfolk Show Ground, Norwich: 10am-1pm.
17 Jun	From satellite to soil The Royal Society , 6-9 Carlton House Terrace, London, SW1Y 5AG: 9am - 5pm.
23 Jun	NIAB TAG NAC Open Day Morley, NR18 9DF. 10am (last tour 1.30pm).

