

Land Management Updates

Farm Advisor updates, news & events from the Wissey, Lark, Little Ouse & Thet

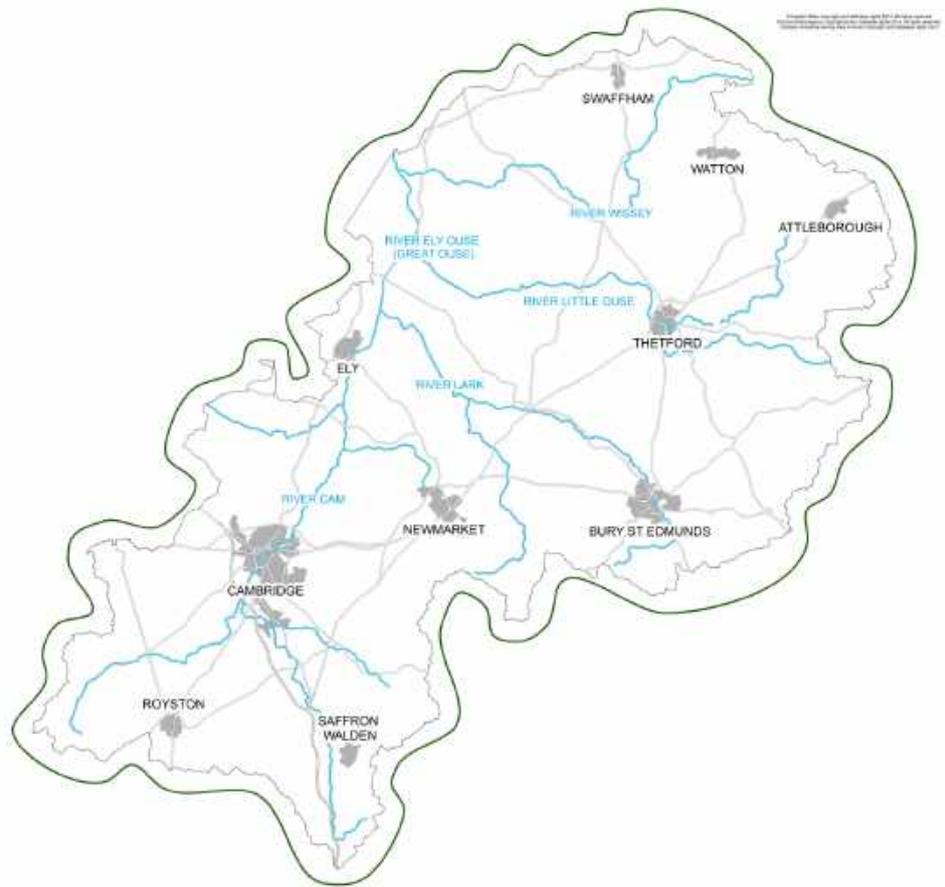


Who are we?

We are a group of organisations from the Wissey, Lark and Little Ouse & Thet sub-catchment partnerships that are particularly interested in improving water quality and increasing water availability. By working collaboratively, we seek to maximise our impact.

Key issues facing these sub-catchments include:

- * Excess siltation – from bank erosion, cattle poaching, road verges and land run-off etc.
- * Excess phosphate loading.
- * Channel modifications and reduced connectivity.
- * Over-abstraction of water.
- * High nitrate in groundwater.



Introduction

Hello all, we hope this e-newsletter finds you well during these challenging times. Pandemic or not, we are still striving to improve soil health, and water quality and quantity throughout our catchment. Please read on to hear what we've been up to, and find out how you can get involved... Enjoy!

1) An update from CSF

Emma Tovell is the new Catchment Sensitive Farming (CSF) Officer for the Wissey catchment. She has been delivering agri-environment schemes for 3 years, and is now looking forward to working with farmers/landowners to manage the levels of phosphates, nitrates and sediment in the catchment. This will be delivered through the CSF program:

- **Mid-Tier:** CSF offers free recommendation and support for your Countryside Stewardship Water Capital Only grant or 5 year Mid-Tier application. Working with CSF can unlock water capital grants available in the scheme to reduce run-off from fields and farm yard areas. The scheme is closed for this year, but is anticipated to open again February next year.
- **Advice:** CSF also provides free professional and confidential advice on your pesticide, nutrient and soils management plans, which can help reduce costs, improve yields and protect watercourses. This includes a range of specialist visits on themes including farm yard infrastructure, farm machinery management, fertiliser planning, improving soil organic matter and tackling ammonia losses.

Please contact Emma if you are interested in any of the visits mentioned, or if you would like general advice on reducing pollution. Phone 07827 553059 or email Emma.tovell@naturalengland.org.uk

EVENTS

1) 16 Sept, NORMAC 2020 - Cultivations Demonstration, Downham Market

There will be a host of new machinery on show, along with tyre pressure demonstrations, soil health talks and farming-related show and advisory stands.

For more information, contact Chris Thomas (County Organiser for NORMAC) on 07968665761 or email chris@tunbeckfarm.plus.com.



2) 10 Nov, REAP 2020: From micro-scape to landscape - innovating at the frontier. 9am-4pm

Agri-Tech East's REAP Conference is taking a farmer-centric view of emerging agri-tech that promises improved decision-making at every level.

This event is being held online. For more information on how to join, click [here](#).



2) Water Resource Advice Visits - Update from the Environment Agency

Under the Environment Agency priority catchment work in the CamEO catchment, we are collaborating with partners to deliver a **water resources advice visit**, which would be looking at water efficiency and potential areas of intervention to support water usage. This project is a non-regulatory visit **across various farm types** working with Natural England and ADAS to achieve the following:

Objectives

- To make farm-specific recommendations which consider leakage reduction, water efficiency, recycling, alternative sources, and appropriate water storage and harvesting facilities.
- To highlight existing good practice in sustainable water sourcing, storage and management, and identify opportunities to develop this further.
- To assist the farmer with on-farm water resource planning to make the farm more resilient to drought, changes in permitted abstraction and disruption in water supplies.
- To provide a subsequent post-visit report to the farmer/grower/land manager in support of the training and information received, this will include a summary of recommendations.

Benefits

- More efficient use of water can help make your business more cost-effective.
- More efficient and sustainable water use means less pressure on the local environment.
- Investment in a more resilient water supply for your business can help sustain longer-term future growth.
- Meet the requirements of certification schemes e.g. Red Tractor, plus advice that can take your business beyond the basic scheme benefits.

Visits can be scheduled between **October to early December**.

Please email Ukwuori Fadairo at Ukwuori.Fadairo@environment-agency.gov.uk if you are interested in this opportunity.



ADVISERS

Anglian Water

Rob Holland (Catchment Adviser)

rHolland2@anglianwater.co.uk / 07802856872

Focus: Working in Norfolk & Suffolk on pesticides, livestock and nutrients.

Fiona Wood (Catchment Adviser/Scientist)

fWood@anglianwater.co.uk / 07764164874

Focus: Working across the region on nutrients.

CLA

Rachel Brooks (East - Rural Adviser)

rachel.brooks@cla.org.uk / 01638 590429

Focus: Providing advice to CLA members on a range of rural issues including BPS, ELS/HLS, Countryside Stewardship and availability of grants.

Natural England

Emma Tovell (CSFO for Wissey)

emma.tovell@naturalengland.org.uk /

07827553059

Focus: Providing Catchment Sensitive Farming (CSF) advice, training and grant support in the Wissey sub-catchment.

Environment Agency

Helen Blower (EA Wissey Catchment Officer)

helen.blower@environment-agency.gov.uk /

02030 255223

Focus: Improving rivers in the Wissey catchment - working with water companies, landowners and the agricultural industry, holding events, river restoration projects and improving water quality.

Norfolk FWAG

Charlie Ennals (Lower Wissey Facilitation Group

Coordinator) charlie@norfolkfwag.co.uk /

07557200212

Focus: Conservation advice, facilitation coordination and countryside stewardship.

Norfolk Rivers Trust

Sam Hurst (CameEO WSF Adviser)

sam@norfolkriverstrust.org / 07944443652

Focus: Water Sensitive Farming (WSF) advice on soil erosion & cultivation, with grants available for mitigation works such as silt traps.

Ed Bramham-Jones (Head of Farming & Water)

ed@norfolkriverstrust.org / 07788377617

Focus: Water Sensitive Farming (WSF) advice on soil erosion & cultivation, with grants available for mitigation works such as silt traps.

3) Tramline disruptor kit - free trials still available

Studies have shown that compacted wheelings and tramlines can be a major pathway for soil and nutrient run-off from arable and vegetable fields, with as much as 80% of run-off originating from these compacted areas of land (Silgrim, 2013).

Through the **Water Sensitive Farming Initiative** (WSF), 3 types of tramline disruption equipment are available to trial in the Broadland, CameEO and Norfolk catchments for free –

with thanks to the Broads Authority for purchasing all of these:

- **Bye Engineering's Wonder Wheel** - for use in vegetable and potato fields
 - The machine has been used across the Broadland Rivers Catchment by several growers on potato fields across North and East Norfolk in the last two summers.
 - Leading tines generate a suitable route for wheeling water, as well as heaving the edge of the bed to increase water infiltration. Secondary tines generate free soil ready for moulding and the moulding wheels shape and consolidate the soil in the wheeling. The profiles generated are "heaps and hollows" which continuously catch and dam running water in small quantities.
 - The profile also directs the water from the centre of the wheeling's to the edges where it then infiltrates into the crop rooting zone.
 - With thanks to Tesco for funding the purchase of this kit.
- **The Creyke Wheel Track Combi** – for use in Cereals/Sugar Beet/Maize/Potatoes and Vegetables
 - The Wheel Track Roller reduces water run-off in crop tramlines by holding water in mini reservoirs. Infiltration takes place down drainage channels directed under the adjoining crop. The centre of the tramline remains compacted to maintain trafficability.
 - The machine is adaptable for operation in combinable crops (cereals) AND ridge / bed grown crops (potatoes / vegetables).
 - Has already been used near Thelveton in potato and cereal crops, where it delivered successful results through the wetter winter months on light soils prone to runoff.



Bye Engineering's Wonder Wheel



Creyke Wheel Track Combi

Identifying sources of pollution in the Upper Lark and Little Ouse catchments

In partnership with the Environment Agency, Norfolk Rivers Trust (NRT) have been investigating sources of pollution in the upper Lark and Little Ouse rivers.

In rural areas, a significant proportion of excess nutrient comes from less obvious, or diffuse, sources including septic tanks, bank erosion and losses from agricultural land itself.

Using available data and local knowledge, a desktop study was conducted to identify the tributaries at highest risk of diffuse pollution. A total of seven watercourses were selected, and a walkover was conducted in these sub-catchments over the autumn and winter of 2019/20.

A total of 121 sources - or potential sources - of diffuse pollution were identified, and NRT aim to address as many of these as possible over the next few years.

To find out more about reducing run-off, storing water, and improving infiltration and soil structure, please contact Sam Hurst at sam@norfolkriverstrust.org



Brecks Fen Edge & Rivers Landscape Partnership Scheme

The ambitious 5-year Brecks Fen Edge & Rivers Landscape Partnership scheme is up and running.

View the full action [plan](#), and stay tuned for further updates in due course.

View the new website [here](#), and follow on social media - [Facebook](#) and [Twitter](#).



- **Llandho Earthwake** – for use in Cereals, Sugar Beet and Maize
 - The Earthwake has corkscrew blades, drawn along the ground like a roller, which cut diagonal drainage channels across the tramlines every two metres, dispersing the accumulation of water into areas where it can drain more freely.
 - Has been trialled in winter cereals and plans for this autumn involve trialling at 3 farms in the Broadland Rivers Catchment on differing soils drilled with winter cereals.

To find out more or to book the kit, click [here](#) and contact one of Norfolk Rivers Trust's WSF advisers.

With thanks to the Broads Authority for enabling these 3 pieces of kit to be trialled for free.



The Llandho Earthwake

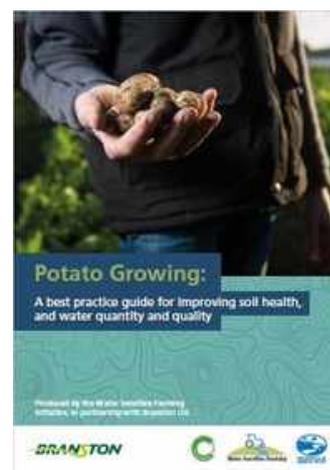


4) Potato Growing: A best practice guide for improving soil health, and water quantity and quality

The [Water Sensitive Farming Initiative](#) has produced, in partnership with Branston Ltd., a best practice guide for potato growers, which is focused on improving soil health and water management.

Growing potatoes can be associated with various risks including the occurrence of diffuse pollution and the degradation of soil. When faced with an ever-changing climate, preparing and following best practice can effectively mitigate against these issues to ensure future sustainability of this crop.

View the guide [here](#).



5) Outdoor pigs as part of the arable rotation

Encouraging better integration of outdoor pigs in arable rotations could help reduce the environmental issues associated with their production - such as groundwater contamination, and sediment and nutrient pollution of rivers - while providing additional benefits, if managed appropriately.

In a partnership project between farmers, Anglian Water, NRT, AHDB Pork and others, two key areas have been explored: uncovering potential soil health benefits from pigs; and retaining soil nitrogen benefits from outdoor pig sites. Summarised below are the main findings so far:

I) Soil health benefits from outdoor pigs

Sampling conducted at two outdoor pig units in East Anglia between autumn 2018 and spring 2020 suggest:

- Nutrient benefits were clearly seen after sows, particularly in phosphorus, zinc and sodium. Increases in sodium, magnesium and potassium were seen after weaners.
- Grass cover in radials partially protected against soil compaction.
- Green crops sown post-pigs may be effective at removing compaction.
- Worm numbers were not obviously affected by the sow unit.
- There was an indication that microbial populations were enhanced under the grassed sow unit, but more extensive data is needed to confirm this.
- Full report [here](#).

II) Retaining the soil nitrogen benefits of outdoor pigs

Findings from soil sampling at several outdoor pig units over a three-year period suggest:

- Outdoor pigs have the *potential* to provide a nitrogen (N) benefit to following crops. Retaining and using this nitrogen would provide multiple farming benefits (e.g. economic and carbon footprint) and improve ground water quality.
- Plant cover helps to retain N in the soil, but without good green cover, winter losses can be large.
- Spring Soil Nitrogen Sampling (SNS) indices post-pigs can still be high, even after a wet winter with poor ground cover – do SMN soil testing to measure this.
- Sampling or allowing for 'Additionally Available Nitrogen' is recommended post-pigs.
- Full report [here](#).



There is currently grant funding and support available from the Water Sensitive Farming Initiative for green cover seeds, as well as for silt traps, high risk gateway relocation, cross drains and buffer strips etc.

Thanks for reading!



If you would like to join one of the partnerships, have any queries, or wish to unsubscribe from this bulletin, please email georgia@norfolkriverstrust.org