

### Defra considers options following winter floods

NEWS 30/01/2024

News 26



More farmers could be paid to store floodwater on their farms to help reduce the risk of flooding from extreme weather.

It follows a series of winter storms which has seen fields in Anglia - with fields likely to remain submerged for weeks - rotting in the field.



## Nature loss linked to farming intensity

14 September 2016



## UK farmers warn of rotting crops after Storm Babet flooding

National union members urge government to create water strategy to prevent such losses



Fields in Anglia have been heavily damaged by the recent flooding caused by Storm Babet. Photograph: Ben Birchall/PA

# Beth Metson

## Head of Agricultural Advice

# Why?

Need for more **resilient** business models

- Reliance on support
- Market Volatility
- Nature needs to work for us
- Public & private investment



We need rapid action to address the **climate emergency**

- Farming and land-use impacts are great
- Soil as a carbon sink
- Species loss



Businesses increasingly need **environmental data** from farms

- Supply chain sustainability<sup>9</sup>.
- Customer pressure
- Legal regulation requires companies to report on supply chain environmental impacts<sup>11</sup>.

# What?

Exchange is for **all** types of farmers

- **Measure, advise & financial incentives** towards farming sustainably



Understand the links between profitability and sustainability



Future Proofing



Funding Opportunities



*We aim to help a farmer understand this through:*

- *Quantifying cost savings*
- *Maximising public money*
- *Accessing price premiums*
- *Getting ready for natural capital payments*

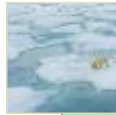
# What Exchange assesses on farm?

Exchange uses technology, trained advisors and primary farm data to calculate a farm's environmental impact



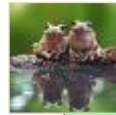
## Healthy Soils

- Soil Organic Matter
- Structure
- Bulk density
- Earthworm Count
- pH



## Emissions and sequestration

- Emissions
- Sequestration in soils and vegetation
- Carbon stocks and flows available



## Water systems

- Flood risk prevention
- Nutrient runoff
- Nutrient balance
- Water usage



## Biodiversity

- Landcover breakdown
- Non-farmed habitat ratio
- Woodland and hedge connectivity score
- Grassland/arable flora species abundance
- Bird species abundance
- Invertebrate species abundance
- Biodiversity practice score
- Hedgerow assessment



## Animal welfare

- Welfare outcomes assessment
- Antibiotic usage



## People and Society

- Land access
- Engagement with community
- Upskilling

# How?

Robust

Open

Reviewed

- Methodology
- Leading scientists; **Scientific Advisory Group.**
- **Open source** and **open to critique.**
- Measure **holistically**
- Focus on **outcomes** not practices.



# How? On-farm support

Agricultural advisors & Farm technicians

## Support to calculate an Exchange score:

- Technicians collect **primary data** & observations
- Work alongside a farmer to complete a **carbon calculator** and **nutrient balance** calculator.
- **understand** how the farm works and where there is interest in making progress on sustainability.

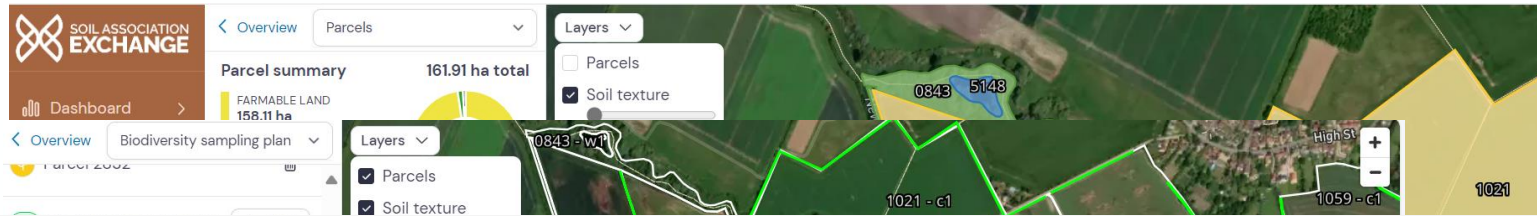
## Support to improve:

- Farmer receives support from advisor to **understand** their Exchange report.
- Advisor provides **bespoke support** to help the farm create an action plan of how they can improve their farm.
- Advisor provides advice on what **financial incentives** exist to implement the practice changes.



# Habitat Maps & Sample Plan

## Layering up the farm story



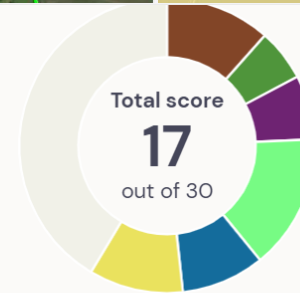
### Report Results

#### Welcome Beth

This dashboard provides an overview of how your farm is performing across 6 different impact areas. Your scores are derived from comparing your farm to other farms like yours, using evolving industry benchmarks. Every farm is unique, so use the results to enable you to identify areas to focus on.

#### Executive summary

+ Add summary



#### Soils



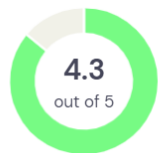
#### Carbon



#### Biodiversity



#### Animal Welfare

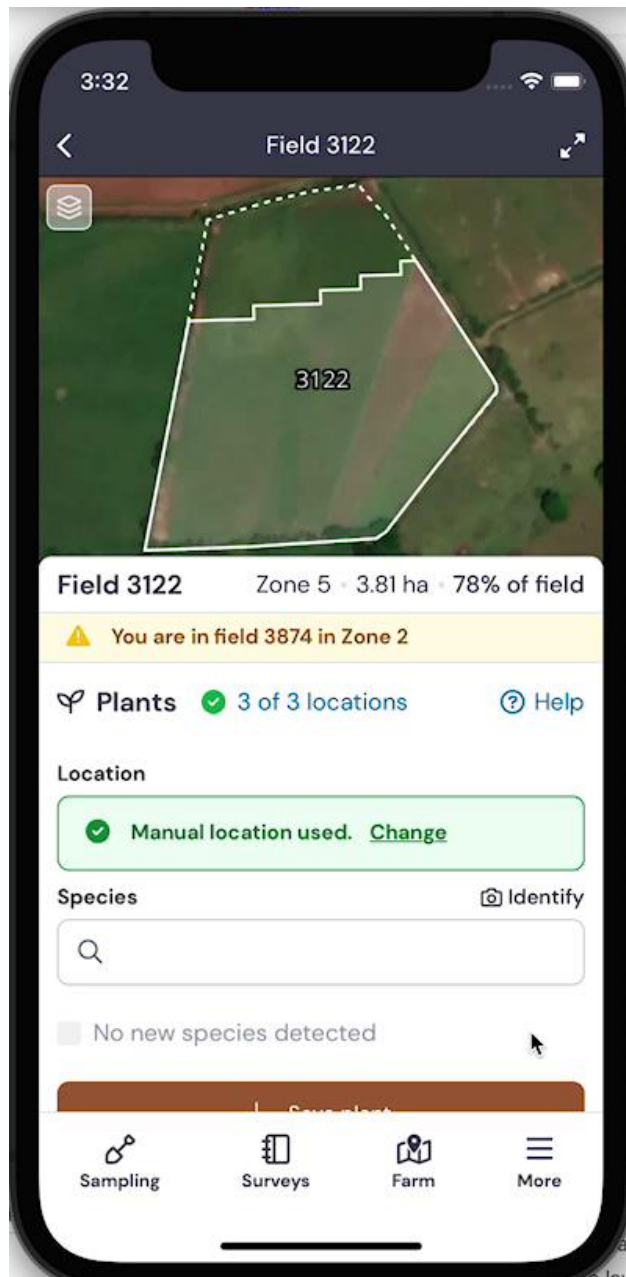


#### Water



#### Social





Dashboard

- Dashboard
- Action Plan
- Funding
- Map
- Learning Hub

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- Help and Support
- Settings
- Logout

AH Airy Hill Farm

Dashboard

# Airy Hill Farm

To enhance soil health at Airy Hill Farm, implement agroecological strategies: crop rotation, cover cropping, composting, agroforestry, conservation tillage, efficient water management, IPM, and livestock integration. These practices improve soil fertility, prevent erosion, conserve water, reduce pests, and promote biodiversity for sustainable farming.

**Total Score**  
**22.8**  
out of 30

Soil

3.8  
out of 5

Carbon

3.8  
out of 5

Biodiversity

3.8  
out of 5

Animal Welfare

3.8  
out of 5

Water

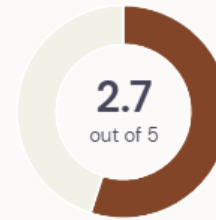
3.8  
out of 5

People & Society

3.8  
out of 5

## Healthy Soil

**i** Soil health is a really critical metric. Great soil health will influence everything from crop efficiency, to herd health, to water resilience to pest control. Increasing things like soil organic carbon and soil biodiversity helps create a better, more dynamic living soil, which is better for your farm operation and draws down atmospheric carbon at the same time.



### Advisor note

+ Add note

### Soil organic matter

[More details →](#)



### Bulk density

[More details →](#)



### Soil pH

[More details →](#)



### Earthworms

[More details →](#)



### VESS

[More details →](#)



## Soil organic matter

**i** Measuring soil organic matter (SOM) is important because it helps assess soil fertility, promote soil health, manage carbon sequestration, make informed soil management decisions, and reduce environmental impact. It allows you to optimise agricultural practices, enhance productivity, and work towards long-term sustainability. Monitoring soil organic matter enables you to adjust your practices, improve crop yields, and minimise negative environmental impacts such as soil erosion and nutrient runoff. Measuring SOM is also important if you want to access subsidies like the Sustainable Farming Incentive and demonstrate the carbon footprint of your farm.



### Soil organic matter average zone score



How is this calculated? [How can I improve?](#) **1**

#### Advisor recommendations

These are tailor made recommendations from our advisors specifically for your farm

##### Soil Organic Matter

Your soil organic matter (SOM) range between 3.5% and 9.6% with your arable fields being noticeably lower than your grassland. Working on raising them...

**SOILS** Soil organic matter

[Read more](#)

#### General recommendations

##### Organic matter

Earthworms open up and mix soil helping its structure, they make nutrients available and decompose organic materials. Organic matter...



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**Earthworms** [Soil organic matter](#) [Read more](#)

[View all recommendations](#) →

### Your sampled data

ZONE	SAMPLED FIELDS	FIELD TYPE	AVERAGE RAINFALL (MM)	CLAY %	SOM %	SCORE
1	4980	arable	680mm	25%	3.5	1-2-3-4-5
2	3384	grassland	680mm	25%	6.5	1-2-3-4-5
3	8843	arable	680mm	25%	4.3	1-2-3-4-5
4	6948	grassland	680mm	25%	7.8	1-2-3-4-5
5	1260	arable	680mm	25%	4.1	1-2-3-4-5
6	6061	grassland	680mm	25%	9.6	1-2-3-4-5

# Traction

Achievement since launch in 2022

- 430 farms visited in for 2023.
- 100% farmers said the service met or exceeded their expectations.
- Working with leading agrifood companies to measure their environmental impact.



National Trust



Nestlé



M&S



Foodbuy

PROCUREMENT REIMAGINED



Department for Environment Food & Rural Affairs



## Wildfarmed: How regen farmers can benefit from premium



A new route to market for cereals grown with regenerative farming practices is on offer from

## Bale grazing as a cost saving and environmental solution explored in new trials

17th April 2023 | Author: [Henrietta Szathmary](#)

New Innovative Farmers research is investigating the use of hay bales for winter mob grazing in a bid to boost soil health, biodiversity and animal welfare while cutting housing and labour costs.

## Farmers in Cornwall working to reduce carbon footprint

8 June 2023



### Gloucester farmer allows land to flood to protect city

9 January



Debbie Wilkins has converted arable land that floods into grass and hay meadows.



New report finds up to 45% increase in commercial return for nature-friendly farms

Friday 23 June 2023

Thank you

# References



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