

## Diss Monitor Farm soil health scorecard

### What is the soil health scorecard?

In 2016, AHDB and BBRO funded the five-year [Soil Biology and Soil Health Partnership](#). With its focus on soil health, one ambition is to produce a toolkit to assist with its measurement and management. An output of the project is the development of a soil health scorecard which uses a traffic light system to score soil health indicators. Threshold values are used to score the results as red (requires further investigation), amber (continue to monitor) or green (no action needed). As part of the project, the scorecard was tested on seven experimental sites over a range of soil management histories and soil types. In autumn 2019, Monitor Farm hosts from [Canterbury](#), Diss, [Huggate](#), [Loppington](#), [Pembrokeshire](#), [Saltash](#) and [Vale of Belvoir](#) each had six fields sampled and assessed using the scorecard approach. Information on the scorecards on other Monitor Farms can be found on their webpage.

### The soil health scorecard at Diss Monitor Farm

Richard farms both beef and arable at Rookery Farm, in Diss on the Norfolk/Suffolk border. His arable rotation includes wheat, oilseed rape, winter barley for feed or spring malting barley. Improving soil health is high on Richard's agenda, with the 380 ha of arable land spanning a range of soil types, from sandy loam to heavy clay loam. He mainly operates a min-till system but assesses each field and manages it based on the soil health.

The results generated from the soil health scorecards were expected for Richard, he said "it confirmed some things we were already starting to see elsewhere." The number of earthworms correlated with where organic matter had been applied and the soil surface structure was improved under the catch crop.

Richard suspected that the earthworm counts were lower in some fields due to the timing of the soil assessment, which was done at the start of a wet period after a sustained dry spell. He went out with a spade a couple of weeks later and the earthworm numbers were still increasing.

Prior to the scorecard, he had some EC scanning done of the farm. It has now been four years since the EC scanning so Richard is planning more soil tests this year.

Going forward, Richard would like to utilise the discussion as part of the Monitor Farm programme to identify a drill that will work best for the system, taking into account the size of his farm whilst considering soil health. He will use the soil health scorecard as a point for discussion in future Monitor Farm meetings as he felt that it is good for gauging where the fields were at as well as providing a useful visual of what they want to achieve.

## Soil health scorecard – Autumn 2019

Field name	Workshop	Rookery 36	Rookery 30	Rookery 18	Pylon - Heavy	Pylon - Medium
<b>Current crop</b>	Cropping - combinable crops	Cropping - combinable crops	Cropping - combinable crops	Cropping - combinable crops	Cropping - combinable crops	Cropping - combinable crops
<b>Texture</b>	Medium	Light	Light	Light	Medium	Light
<b>pH</b>	8.4	8.1	7.7	6.4	8.1	7.4
<b>SOM %</b>	4.2	2.7	3.2	2.6	4	4
<b>Ext P - mg/l (Index)</b>	16	16.4	16.6	11	8.6	15.8
<b>Ext K - mg/l (Index)</b>	198	138	213	108	153	173
<b>Ext Mg - mg/l (Index)</b>	52	36	59.1	52.6	58.2	72
<b>PMN (mg/kg)</b>	68.49	46.29	69.31	37.92	91.85	108.39
<b>CO<sub>2</sub>-burst (mg/kg)</b>	111	59	99	89	99	119
<b>VESS</b>	2	2	2	2	2	1
<b>Earthworms (No/pit)</b>	11	3	17	9	3	3

### Further information

[Principles of soil management](#)

[Field drainage guide](#)

[Arable soil management: cultivation and crop establishment](#)

[Introduction to soil biology](#)

[How to count earthworms](#)

[Soil Biology and Soil Health Partnership](#)

[Testing the soil health scorecard](#)

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