

# Stowmarket Monitor Farm

## Meeting 13: Soil Health

2 December 2016

Wyverstone Village Hall, Stowmarket

### Speakers:

**Brian Barker – Soil: the dark science**

**Russ McKenzie – Crop establishment**

**David Walston – Building productive soils**

**Ian Robertson – Soil assessment**



For more information, visit:

[cereals.ahdb.org.uk/Stowmarket](http://cereals.ahdb.org.uk/Stowmarket)

**Brian Barker, Stowmarket Monitor Farmer**

## Meeting Summary – key messages

1. Soils are three dimensional – you need to consider the biological, chemical and physical aspects and consider 50% of soil is not soil – 25% water, 25% air, 45% mineral, 5% organic matter.
2. Important to know your own soils – many different soil assessment methods available from using a spade to nutrient testing. Important to be thorough and consistent.
3. Consider the reasons behind the need for soil testing on your farm and make sure that the results are interpreted in the correct way, for example considering crop offtake and peak demand of the plant.
4. Many different ways to increase soil health – cover cropping, companion cropping, grazing, manure applications, establishment technique, longer rotations – has to be appropriate to your farm situation. “No-one knows your farm better than you”.

For further information, follow the links below for AHDB guidance on:

- [Soil Assessment Methods](#)
- [Introduction to Soil Biology](#)
- [An Introduction to Earthworms](#)

## #soilmyundies farm try-out

A comparison of cotton underpants, buried by Brian in different plots on 29<sup>th</sup> September 2016 for 8 weeks. Note the difference between the strip till and min till wheats (both after grass). A difference between 4 cultivations (1) and 9 cultivations (2). The grass ley (3) had no breakdown – possibly due to lack of moisture.



1. Strip tillage

2. Minimum tillage

3. 5 year grass

## Group SWOT Analysis on Soil Health

The group discussed the strengths, weaknesses, opportunities and threats to our soils on-farm.

### Strengths

- Monitoring soil
- Worms
- Long rotation
- Monitor farms
- Knowledge exchange
- Manure

### Weaknesses

- Flexibility
- Short rotations
- Poor testing for nutrients
- Root crops
- Loss of drainage
- Short term occupation
- Machinery weight
- FYM shortage
- Bad timing
- Loss of knowledge

### Opportunities

- Controlled traffic farming
- Cover crops
- Cost reduction
- Direct drilling
- Decrease lock up
- Muck
- Precision technology

### Threats

- Productivity
- Drainage
- Regulation
- Taking carbon from the land
- Mindset
- Cover crops
- Weed management
- Too much data

## Next Meetings

| Date                                      | Topic               |
|---|---------------------|
| 6 January 2017                            | Crop establishment  |
| 3 February 2017                           | Business resilience |
| 11am at Wyverstone Village Hall, IP14 4SH |                     |

**To attend the meetings, please contact your AHDB Cereals & Oilseeds Knowledge Exchange Manager:**

|                |  |              |
|----------------|--|--------------|
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**To find out more about AHDB's benchmarking tool, please contact:**

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