

# Simply Sustainable Soils

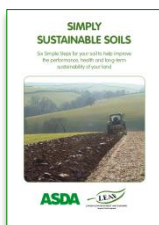
## Background: Soil Degradation

- Soil management and fertility is an important part of Integrated Farm Management (IFM)
- Widespread soil degradation has arisen as a result of intensive farming practices
- Effects are being felt through a drop in productivity
- Tools and advice are required by farmers to promote sustainable soil management

## Simply Sustainable Soils...

- Booklet to help farmers assess their soil and track progress
- Developed by LEAF and ASDA in 2011
- Soil score produced from six simple steps:

1. Soil Structure
2. Drainage
3. Compaction
4. Soil Organic Matter
5. Soil pH and Nutrients
6. Biological Health



## ...Continued

- 2 years on, LEAF and ASDA are keen to collect detailed information to support farmers
- Data was collected from a group of reference farms to produce a set of case studies to form benchmarks for other farmers
- Information on soil quality, yield, management and inputs was collected
- Reference farms cover a range of soil types, farm types and locations

### BELLSHILL FARM

136ha arable farm on sandy loam

The soil has undergone a complete transformation since 1997 due to numerous factors:

- Organic matter additions to improve soil structure
- Change in tillage practices and improved timeliness of operations
- Introduction of grass leys (more grass, more livestock, more FYM)
- Smaller fields allowing more specific management



Split field in a grass rotation

### WANTIDEN HALL FARMS

627ha vegetable, arable, sheep and pig farm on sandy soil

Different techniques are used to enhance different soil parameters

- Erosion: Cover crops and fir tree belts
- Fertility: Pigs put into rotation
- Structure: Annual organic matter additions were increased 5 years ago
- Cost: Introduced minimum tillage in 2010 to cut costs



Fir tree belts and pigs



## Conclusions

- Soil parameters are site specific
- The drive to produce common guidelines leads to generalisations.
- By providing data in a set of localised case studies, LEAF hope to integrate technical and tacit knowledge at a local level
- From here, LEAF hope to build up a database that can have relevance across the country

