



UNIVERSITY OF  
LINCOLN

# In Field Soil Assessment

Dr Iain Gould

# First Step: Get Digging!



# Soil Structure



Source: Environment Agency **thinksoils** – *Soil Assessment to avoid erosion and runoff* - 2008



**Good Condition VS = 2**

Good distribution of finer aggregates with no significant clodding.



**Moderate Condition VS = 1**

Soil contains significant proportions of both coarse firm clods and friable, fine aggregates.



**Poor Condition VS = 0**

Soil dominated by extremely coarse; very firm clods with very few finer aggregates.

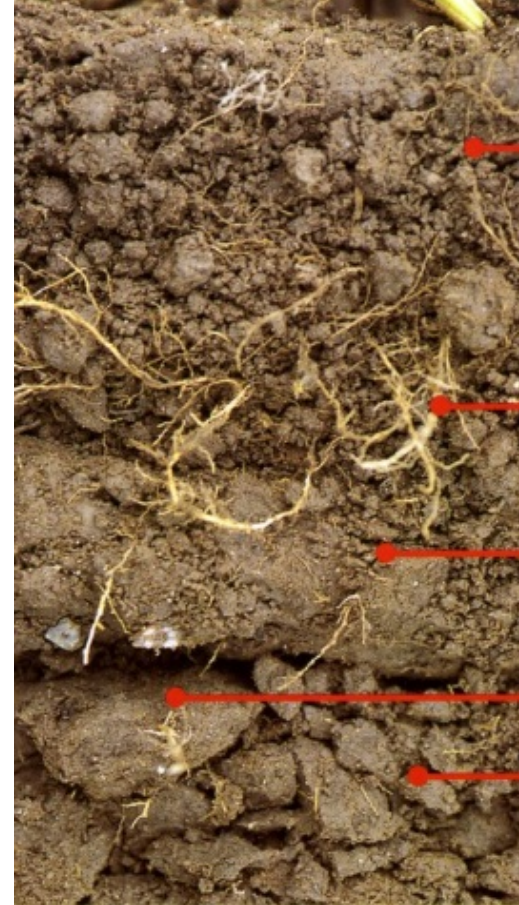
From the **Vaderstad Soil Visual Assessments Guide** – 2016 Edition

<http://www.smartagriplatform.com/resources/Pictures/Visual%20Soil%20Assessment%202016%20Edition.pdf>

# Soil Biology: Earthworms



# Compaction



# Clean up the profile – Take a good look



# Other Basic Assessments

- Colour
- Odour
- Water Infiltration



### **Aggregate No. 1**

- Bare Soil Overwinter
- Low Organic Matter Content
- Very few roots or earthworms

### **Aggregate No. 2**

- Grass Ley (2+ years)
- Moderate to High Organic Matter Content
- Frequent roots and moderate earthworm count

