

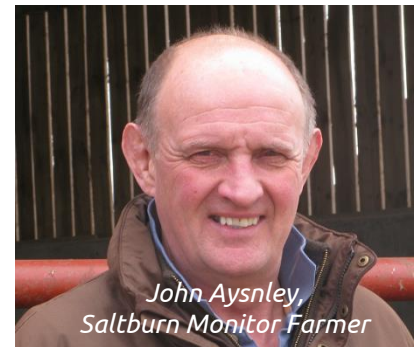
Saltburn Monitor Farm Meeting Report

Meeting 10 – Tyres and cultivations

28th February 2019

Guisborough Rugby Club

For more information, visit: cereals.ahdb.org.uk/saltburn

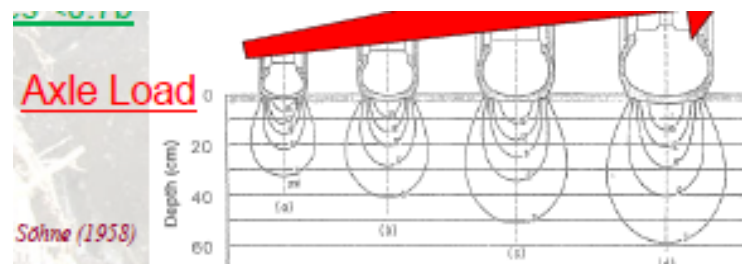


Meeting Summary – Key Messages

- Prevention of soil compaction is better than cure.
- Ensure that the correct weight is used for the correct task.
- Where is your compaction? Check before doing work and if you've got a problem, fix appropriately.

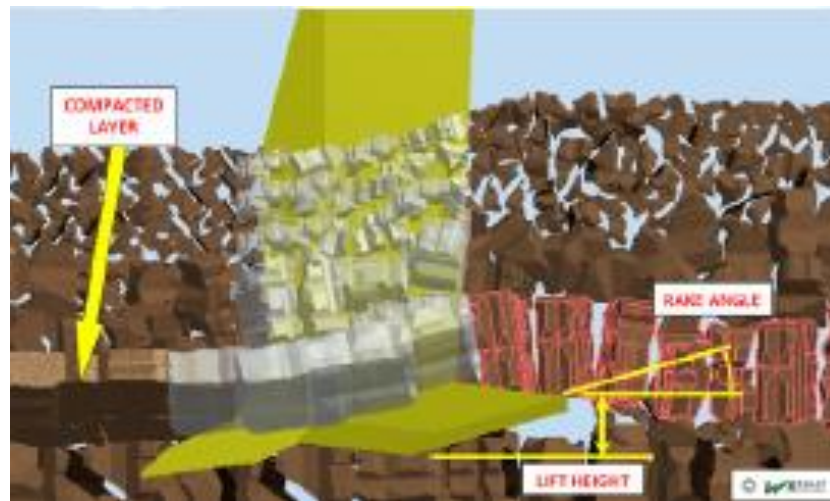
Tyres and cultivations – Philip Wright, Wright Resolutions Limited

- Soil compaction, restricted drainage and waterlogging and poor aggregation all cost in yield to crops.
- Prevention of compaction is better than cure. Consider target pressure and axle load.
 - Target pressures = <math><0.7b</math>
 - Axle loads have an increasing effect on compaction at depth:



- Consider the effects of all operations on soil structure, especially cultivations, drilling and manure spreading.
- Soil structure is intimately linked with organic matter. Resistance to compaction is achieved by increasing levels of organic matter.
- Ballasting and balance is important to be correct to minimise compaction – ensure you have the correct weight for the task.
 - For wheeled tractors with a trailed implement:
 - Without suspension = 35% on front axle
 - With front suspension = 40% on front axle
 - Note: Excess weight on the front axle leads to high tyre pressures which causes increased compaction

- Tyre pressures
 - The load capacity, weight on the tyres and speed all determine the correct tyre pressure
 - Check specific manufacturers guidelines for your tyres and adjust accordingly
 - Most tyre manufacturers will be happy to visit the farm with a weigh cell to check your tyres, ballast and pressure settings
- Cultivations:
 - Rake angle is very important to consider for the job that you are doing:
 - High rake = compact and consolidate
 - Low rake = lift or loosen
 - Failure type depends on moisture to be effective
 - Ensure that you are working to the critical depth – use a spade to check the depth of compaction before cultivating
 - Consider disc openers vs tine openers – both have advantages in different situations
 - For soil remediation, ensure that this is being done effectively:



- Be careful that hair pinning doesn't occur when using discs for direct drilling
Consider where roots can be used instead of metal to have an effect on soil structure, eg. the use of cover crops.

Find out more...AHDB Information and Research Links

[AHDB GREATSOILS](#) – for all soils related information, publications and research

[Field Drainage Guide](#)

Soil Management Guide – coming soon!

Further Information

For details about the Saltburn Monitor Farm and past meeting information, please visit:
cereals.ahdb.org.uk/saltburn.

Contact Details

For more information, please contact:

Teresa Meadows teresa.meadows@ahdb.org.uk 07387 015465 @CerealsEA

While the Agriculture and Horticulture Development Board seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document. Reference herein to trade names and proprietary products without stating that they are protected does not imply that they may be regarded as unprotected and thus free for general use. No endorsement of named products is intended, nor is any criticism implied of other alternative, but unnamed products.

AHDB Cereals & Oilseeds is part of the Agriculture and Horticulture Development Board (AHDB)

© Agriculture and Horticulture Development Board 2019