

The surface of grassland can become compacted as a result of extended grazing in inappropriate ground conditions or overstocking. This can reduce the infiltration of rainfall at the soil surface, increasing the risk of run-off and flooding. Sward slitters or aerators can alleviate **shallow** compaction caused by livestock poaching or surface capping, in turn improving water infiltration and helping to increase grassland productivity.

When and how to slit or aerate

- Grassland slitters and aerators have a limited working depth (0-10cm) and aim to increase surface aeration and improve surface infiltration
- There are a range of different grassland slitters and aerators, but the general principle is to cut through the soil surface and any matted vegetation layers with thin blades or tines to open up the top layer of the soil to disrupt compacted layers
- The amount of soil disturbance will depend on forward speed, soil moisture level and angle of blades
- Slitting is most effective when the soil is moderately dry and non-plastic to allow the leg and tines to create lateral and vertical fissures in the soil. This is generally in September/early October, but it is important to check soil conditions as this will be variable depending on weather
- Do not stock or perform field operations for **10 weeks** following slitting, as weight bearing capacity of recently disturbed soil is reduced and at risk from further compaction if stocked or travelled
- Prolonged dry weather following slitting operation can result in reduced sward productivity



Further requirements

- Check that compaction is present in sward at the surface (top 10cm of soil)
- Ensure that slitting will not damage any archaeological features and, if grassland is unimproved, that it is not subject to an EIA which may restrict management options
- Ensure that slitting is permitted in options that you are entered into in any agri-environment schemes
- The grass being slitted must be at least a **2 year old ley**
- Those successful in bidding for this measure will be contacted by a FWAG SW Adviser to discuss the location and suitability for grassland slitting, which may include a site visit

Please note: Grassland slitting should be undertaken in Autumn 2021 if and when soil conditions are appropriate as described above

