

# Grass MOT

Field Name:				Field Purpose:			
Size:		ac/ha	Age of ley:		yrs	Grazing	<input type="checkbox"/>
Mixture:				Cutting		<input type="checkbox"/>	
				Both		<input type="checkbox"/>	
Soil Type:				Soil Tests:			
Sand		<input type="checkbox"/>	Silt		<input type="checkbox"/>	pH:	
Sandy Loam		<input type="checkbox"/>	Chalk		<input type="checkbox"/>	Phosphate (P)	Index ppm
Clay Loam		<input type="checkbox"/>	Peat		<input type="checkbox"/>	Potash (K)	Index ppm
Clay		<input type="checkbox"/>			<input type="checkbox"/>	Magnesium (Mg)	Index ppm

Circle the appropriate boxes

Assessment:		RED	AMBER	GREEN
Compaction	Dig a hole (30 cm <sup>3</sup> ) and feel for tightness of soil	Soil tight through profile	Soil tight in places	No compaction present
Worms	Count number of worms	0–6	7–12	>12
Root depth	Measure the length of roots through sod	<15 cm	15–30 cm	>30 cm
Colour	Look at the colour of the sod	Rusty, grey mottled	Rusty, brown	Dark topsoil
Smell	Smell the sod	Foul smelling	Slight smell of rotting	Earthy, woody

Ground cover (all vegetation)	Assess % of ground cover – re-seeds	<50%	50–75%	>75%
	Assess % of ground cover – permanent pasture	<85%	85–95%	>95%
Broad-leaved weed cover	Assess % of ground covered by weeds	>10%	5–10%	<5%
Clover content (dry matter)	Assess % of grazing that is clover – SPRING	<10%	10–30%	>30%
	Assess % of grazing that is clover – AUTUMN	<15%	15–40%	>40%
Weed grasses	Assess % of weed grasses or unsown species	>50%	20–50%	<20%

Main weeds	Dock <input type="checkbox"/>	Chickweed <input type="checkbox"/>	Ragwort <input type="checkbox"/>	Other <input type="checkbox"/>
	Thistle <input type="checkbox"/>	Nettle <input type="checkbox"/>	Buttercup <input type="checkbox"/>	

Sward height	Sheep	>10 cm	6–10 cm	<6 cm
	Cattle	>15 cm	8–15 cm	<8 cm

Prescriptions (e.g. low input)	
--------------------------------	--

Notes (e.g. operations carried out, application of nutrients)	
---------------------------------------------------------------	--



# Grass MOT

Target any areas where red boxes have been circled to bring the field back into optimum performance. Then move on to areas with amber boxes circled. Fields should be re-assessed after treatment to monitor its effectiveness.

**Soil tests** – the target for pH is 6.0–6.5, for phosphate (P) is 2 (16–25 mg/l), for potash (K) is 2- (121–180 mg/l) and for magnesium (Mg) is 2 (5–100 mg/l). Yields will be reduced if these are off target, plus high broad-leaved weeds content and low clover cover can be a result.

**Compaction** – if soil is tight through profile, action needs to be taken to improve soil structure. An aerator can be used if the compaction is in the top 15 cm, if the compaction is deeper then a sward lifter or plough should be used. This should be done either spring or autumn time when the soil conditions allow.

**Worms** – low number of worms indicate problems that can relate to poor plant growth – too dry, wet, acidic, alkaline, compaction or too little organic matter. They can be encouraged by getting the pH and drainage correct, dealing with compaction and ensuring good grazing management and rotations.

**Root depth** – shallow roots indicate compaction and poor soil structure, or low phosphate levels. They will limit plant productivity, as they can't access as many nutrients from the soil. Check for compaction, and look at soil test results.

**Colour** – rusty or grey mottled soils indicate poor drainage (temporary water-logging) and anaerobic (oxygen starved) soils. They will lead to poor growth as the soil will be colder and uptake of nutrients will be poor. Acidic conditions in anaerobic areas will damage the roots. Check for compaction and drainage.

**Smell** – foul smelling soils indicate poor drainage (temporary water-logging) and anaerobic (oxygen starved) soils. They will lead to poor growth as the soil will be colder and uptake of nutrients will be poor. Check for compaction and drainage.

**Ground cover** – Low ground cover allows the ingress of weed grasses and broad-leaved weeds, which will reduce the output per hectare. The loss of sown species indicates poor fertility, soil structure and grazing management. Check soil test results, for compaction and sward heights.

**Broad-leaved weed cover** – High levels of weeds will reduce output per hectare. Identify the types of weeds and use chemical or physical control where appropriate. If possible, a weed wiper should be used to prevent losing the clover from the sward.

**Clover content** – low levels of clover can indicate poor soil fertility, over or under grazing, and poor mixture selection. Clover levels should be higher in the autumn as the soil temperature will be higher, and favour clover growth. Check soil tests and sward heights.

**Weed grasses** – A high proportion of weed or unsown grasses could indicate poor fertility, soil structure and grazing management. Check soil test results, for compaction and sward heights. A full re-seed may be necessary.

**Sward heights** – swards that are too high indicate poor grazing management, which is reducing utilisation and feed quality, and increasing feed costs. Increase grazing pressure or increase areas for conservation, and use a sward stick to measure sward heights weekly to check whether heights are on target.

## Further information:

EBLEX manual – Improving soils for Better Returns

EBLEX manual – Managing clover for Better Returns

EBLEX sward stick

