

LIVESTOCK

After the wet autumn and winter, a lot of grassland is in need of proactive management to remove compaction, revive soils and restore plants lost from standing water and floods. **Farmers Guardian** reports.

Get air back into soils to help resurrect grassland

The heavy and prolonged rainfall experienced in most areas of the UK will have sealed the soil creating surface compaction and preventing air interchange in the soil below.

And where there has been flooding or standing water, the soil's profile will have become saturated, says Opico's James Woolway.

He says: "In both cases, the resultant lack of oxygen in the soil will have killed off important micro-organisms and worms and left a sour-smelling dead soil.

Breathing life

"To resurrect grass growth this spring, it is vital to get air back into these soils to breathe life back into them as soon as possible."

SHALLOW COMPACTION

TO break up surface compaction and any shallow compaction incurred by livestock, James Woolway says the ground should be worked with a slitter or aerator as soon as it is dry enough to bear a small tractor.

He says: "Do not wait too long, as there needs to be enough moisture for the soil to have 'give' in it. Ideally, the slitter/aerator needs to be set up so the blades/spikes are cutting into the ground to a depth of 10-12cm.

"Farmers need to make a

judgement on the day as to whether weights are going to be needed to achieve this.

"It will depend on the soil type, its structure and moisture content.

"To ensure the best results, it is worth doing a couple of runs then getting off the tractor to check the depth of the slits.

"If patching in seed is to follow, the ground should be left for a few days to give the soil and its organisms time to revive."

DEEP COMPACTION

IF soil compaction extends deeper than the slitter/aerator can reach, James Woolway says subsolling/sward-lifting is required.

He says: "Last autumn, many farms which would normally have sward-lifted a certain acreage to remove deep compaction did not get the chance. It was just too wet.

"Although autumn is the best time to carry out this operation, subsolling can also be done in spring, but the earlier the better to enable grass to get growing again sooner."

Mr Woolway says for subsolling, the ground should be just dry enough to crack: "This spring, however, it is more crucial to improve drainage and get air back into the soil.

Smearing

"Farmers may have to accept conditions are not ideal and subsoller legs/tines may cause some smearing.

"This can be put right properly by subsolling again in autumn. It is more important to do something now to relieve compaction than to do nothing and have poor productivity all year."

POACHED GROUND

THERE is a lot more poached ground around than normal, but James Woolway says before flattening it out with rolls, it is important to first go through with a slitter/aerator to get air into the top layer and let some water away. In some places, subsolling may be needed.

He says: "Where hoofprints have been filled with water for some time and plants have died

off, overseeding may be beneficial, depending on the scale of damage.

"In fact, where any grasses have been killed off, from standing water or flooding, the first species to come back will be indigenous grasses. Reseeding will be needed in these areas to ensure grasses which grow there are the productive species."



GET READY TO GO

AS there is no guarantee about the length of dry weather windows, which are needed for these necessary groundworks, James Woolway says farms with a large area of grassland to manage should not shy away from 'going large' to get the job done.

He says: "Fields can be walked now and plans made. Farmers should take a spade with them to dig some

holes and determine the depth of any compaction, thus whether slitting or sward-lifting is needed.

"From these inspections, a plan can be drawn up of which fields need a total reseed and which can be restored with sward-lifting, slitting, rolling and patching in of seed.

"Then as soon as the ground is dry enough to travel across with a small tractor, renovations can start."



IN THE FIELD IAN MAINWARING, ELLESMERE, SHROPSHIRE

AN effective and time-efficient grassland maintenance programme is essential for Shropshire farmer Ian Mainwaring.

At Crimps Farm, Ellesmere, he runs a mixed farm, including 283 hectares (700 acres) of grassland for his commercial spring-calving suckler herd.

Most of the grassland area is parkland and is permanent pasture. Soils on-farm are mainly loams, but there is some sandy land and some heavy clay land too.

Outwintering

Mr Mainwaring says: "The suckler herd and followers are partially outwintered, so poaching and shallow compaction have always been issues here.

"In a normal year, we will flat roll the parkland in early spring to iron out the poached ground. We used to have a three-metre-wide set of rolls and these had to be literally rolled along the road in between fields.

"A few years ago, we invested in a set of He-Va grass rolls which fold down to an 8m working width,

but fold up hydraulically for moving between fields. This significantly increased our daily work rates.

"We not only cover more ground more quickly in the field, we can also safely achieve road travel speeds of 20mph.

"Once the ground has been rolled, we follow with a 6m-wide folding slitter, then we will take a tine harrow through to remove molehills and cowpats. Sometimes we roll a second time, but we will make that decision on a field by field basis.

"Once ground had been levelled, we reseed any bare areas using a seed box on our grass harrow, or broadcast seed on with a slug peller on the back of a quad bike.

"This spring, the rolls and slitter will have a lot of work to repair damaged swards from the very wet autumn and winter we have experienced. As well as poaching, there is rutting of tracks and we have had waterlogging and flooding too."

Silage leys account for 81ha (200 acres) of grassland and are reseeded on a rotational basis every five years. Cattle do not graze these

fields and so the spring maintenance programme is just two steps: slitting to get air down to grass roots to stimulate growth; then rolling.

Mr Mainwaring says: "Rolling is important, but not just to keep soil out of the clamp by flattening

Crimps

down loose the slitter levelling or "Rolling pollution; a and there i nearby car



Rolling helps prevent diffuse pollution; a lot of our land is sloping and there is risk of run-off
IAN MAINWARING