

Give your 'winter stressed' swards some close attention this spring

# Time for some TLC

After another harsh winter, what steps can producers take to ensure good grazing and forage yields this year? We take a closer look at overseeding strategies and share a producer's experience of aeration.

text Rachael Porter

A second 'proper' winter with prolonged freezing conditions means that grassland in many areas is showing high incidences of plant tiller death – an indication of winter kill – according to Limagrain's Ian Misselbrook.

"And where plant death has occurred, leaving bare areas, then overseeding is essential to prevent weed ingress and to return grassland to productivity so that grazing and future forage supplies are not reduced," he says. "Although all the NIAB/BSPB recommended list trials give grass varieties a rating for tolerance of cold conditions, the past two decades of relatively mild winters have not provided ideal test conditions. I suspect some of the rankings might change after this winter," he explains.

"Generally, tetraploid varieties of ryegrass tend to have better resistance to cold than diploids, but some varieties do prove the exception to this rule.

"To avoid winter kill, pastures should be defoliated hard at the end of the autumn as the more leaf they carry the more vulnerable they are. This practice, though, is at odds with the principle of building up a wedge of grass during the autumn for early turn-out in the spring. However, if the risk of another hard winter is perceived to be strong, then some common practices may well have to be reviewed," he adds.

Grasses and clovers are tough plants but in extreme conditions they can do with a little help. Recovery from both drought and cold stress is initiated in the root zone, so it's important to remove any compaction

in the soil as this slows down the exchange of water, nutrients and air, and reduces recovery rates.

## Pasture renovation

Now is a good time to check fields for winter damage. In fields where gaps have appeared through plant death, impairing the ley's productivity and stock-carrying capacity, then plans should be made to over-seed these in the early spring.

"Overseeding can be carried out by slot-seeding with a purpose-built drill such as an Aitchison or a Moore, or with a harrow and seeder, which are available from OPICO and Einbok," says Mr Misselbrook.

"When over-seeding, always use a high

tetraploid ryegrass mixture as this will compete more effectively with the existing sward than diploid mixtures. Specialist ley mixtures for slot-seeding conditions are included in the Sinclair McGill range and include varieties with proven early vigour, and the seed is treated with biological seed dressings – Headstart and Integral – to aid plant establishment and tip the balance in favour of the new seedlings.

"When over-seeding clover seed into existing leys, pelleted clover mixtures like Cloverplus are recommended as these not only include Headstart, but the pelleting process also increases the size and weight of the tiny seed which improves flow through the drill and spreadability.

"If it is not possible to over-seed before late April or early May, then it is best to leave it until mid-summer when grass growth slows and the existing sward is not too competitive for the emergent seedlings," he adds.

"And where the productivity of old leys has been further depressed by winter kill, then a full reseed will be well worth the extra effort." |



*Cutting edge: relieving compaction with a splitter will help to maximise forage yields*



## Improve early spring grass growth with aeration

After significantly improving grass growth by easing soil compaction in 2010, Cumbrian producer Jim Maudsley intends to aerate more fields across his 142-hectare all-grassland farm this spring.

Jim concentrated on removing the surface compaction on pastures nearest to Raw End Farm at Endmoor, near Kendal, caused by the 150-cow milking herd, which he milks with his brother John.

Compaction was causing temporary waterlogging, which meant wet soils that stay colder for longer and so reducing the number of available grazing days.

It was the first time the land had been aerated and responded well to the single pass by a 3-metre OPICO sward splitter, penetrating down to 125mm, to relieve surface compaction, get more air to

grass roots and help water drainage. He reports that grass, particularly in poached areas, recovered well.

"It was the first time we've ever used an aerator. I admit we were sceptical at first, but the sward splitter definitely improved surface water drainage of the land and improved grass growth in early spring," says Mr Maudsley. The 72 knife blades on the three-metre OPICO splitter relieved the solid, impermeable layer created by cows' feet and machine travel.

This shallow layer or 'pan' restricts the movement of air, water and nutrients down through the soil profile.

This type of damage also leads to poor root growth, which stresses the plant and reduces its response to nitrogen.

A lack of oxygen means the availability of mineralised nitrogen from organic material in the soil is diminished.

Faced with rising prices for feed and fertiliser, Jim says aerating the soil will help grass swards achieve the maximum benefit from the nutrients supplied through slurry and bought-in fertiliser to help boost forage yields.

They aim to take two good silage cuts a year, and a third when conditions allow. The majority of soils are shallow at Raw End Farm and classed as medium being clay loam over a variable, rock base.

Due to the soil type and rocky subsoil, Jim Maudsley, says the sward splitter is ideal for their ground working down to 125mm and it also requires very little tractor power to pull it, saving on fuel.

To help aeration in drier years, their sward splitter also has a weight carrying rack so that extra weight can be added to the machine in hard conditions by disc weights.