



Sward Health Check

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- *Swards should always have a thorough health check before any programme of renewal to ensure soil conditions are right to support optimum growth.*

Establishing Sward Health

Seven key questions will help identify whether sward health needs further investigation:

1. Is the sward struggling to support the numbers of livestock it did in the past?
2. Is the speed of re-growth after silage slower than it used to be?
3. Are more and more patchy areas developing?
4. Is the population of weeds, especially broad-leaves, higher than it used to be?
5. Has the sward been badly poached in recent years?
6. Has the sward been badly attacked by pests or disease in recent years?
7. Is the sward yellowish and lacking in vigour?

- *If the sward contains less than the target minimum 30% ryegrass and/or any of these conditions apply action is needed. Aim for 70% ryegrass.*

Checking the Essentials

The following checks are particularly important:

Soil pH

- 6-6.5 is ideal for grass swards, 6.5 for grass / clover swards.

pH should be measured every 3-4 years, with a diary established to ensure all fields are checked on a regular basis and their status Recorded.

P and K

- *The phosphate index should be 2 in grass swards; 2-3 in grass/clover swards.*

Soils should be assessed for P and K whenever they are checked for pH and their status recorded.

Dark green areas around dung and urine patches indicate low K status.



Drainage

- *Any wet areas need tackling.*

Drains must be unobstructed and free-flowing. If the drains appear to be operating correctly, soil pans may be the cause.

Weeds, Pests and Diseases

- *The broad-leaved weed content should be below the 10% sward target.*

Effective weed clearance programmes may be needed, using the most appropriate selective (and, where necessary, clover-safe) herbicides.

- *Chafer beetle, frit fly and leather-jackets can significantly reduce sward output, as can crown rust in ryegrass and clover rot in clovers.*

A 15cm x 15cm square of turf should be removed to a depth of 5cm and inspected early in the year – more than one grey larva in the top 2.5cm indicating a leather-jacket infestation. Look at a number of turfs to be sure.

Grass and clover leaves should also be examined for evidence of pests, flecking or black discoloration, or spores. Once a specific problem has been identified it should be tackled using an appropriate proprietary spray applied to the manufacturer's Recommendations.

Soil Nutrient Supply

- *Sufficient levels of routine N fertilisation are essential.*

Poor N supply indicated by yellowish swards can be confirmed by rapid in-field analysis of soil mineral nitrogen in a simple, low-cost procedure.

Where soil mineral status is low, N fertilisation should be undertaken in-line with MAFF Fertiliser Recommendations RB209

- *The ideal N:S ratio in grass should be less than 13:1.*

Yellowish swards are also an indicator of poor S status, which should be confirmed through herbage analysis.

Ratios of greater than 13:1, suggesting an S deficiency, can be rectified by applying 25-45 kg/ha of SO₃.

