

Derelict to Productive – No 4 - A Practical guide – Lime



As we touched on in Guide 3, land improvement is likely to be one of the first tasks you will want to carry out on your new croft. With a derelict croft, if it's not an area of species rich grassland but is an area of previously improved grassland or cropping land that you want to improve, then you could consider adding lime to raise the pH.

What is lime?

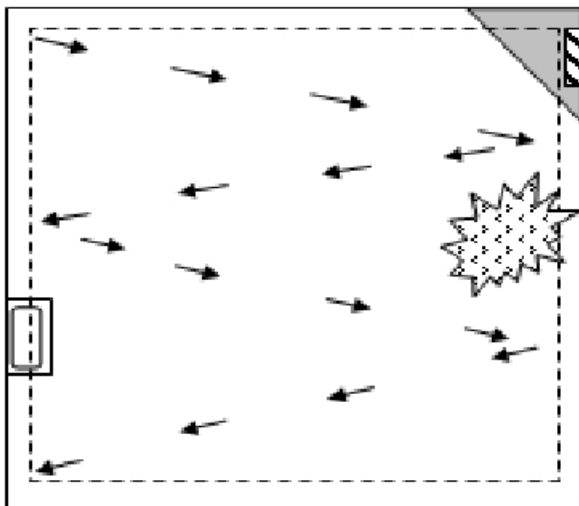
Lime is not an actual fertiliser, it is more a vital ingredient to ensure whatever you plan to sow or plant on your land will be successful. It neutralises acid in the soil to ensure a successful uptake of nutrients by the plant and therefore good plant growth. It also ensures any fertiliser you apply will be efficiently used.

Where to Lime?

The only way to know if lime is required is to undertake a soil sample. If you are sampling the whole of the croft, you may want to concentrate first on the field with the lowest PH. Alternatively if you have identified a particular field for land improvement, you may just sample that field. Soils should be sampled every 4 to 5 years. They are analysed for soil pH, extractable Phosphorous, Potassium and Magnesium.



How to take a soil sample



Sampling can be done with a spade or a soil corer. Sample your field as shown taking a sample at 4 points along each side of the W, total of 16 cores avoiding gate ways, manure heaps, and water troughs. Soils should be sampled every 4 to 5 years. They are analysed for soil pH, extractable Phosphorous, Potassium and Magnesium.

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Why lime?

Any land improvement will cost you money, even with grant support. To increase the chances of these works being successful, you need to know if lime is required and what quantity. Otherwise you may be wasting money applying lime when none is required, or alternatively not applying enough lime. With either scenario there is scope for money loss and or crop failure. Raising the pH above the optimum for grass growth can aggravate marginal trace element deficiencies in livestock such as copper and cobalt. The optimum availability of most plant nutrients in soil occurs in a small range of soil pH values. For mineral soils, this is a pH of between 6 and 6.2.

If the pH of soil is 5.5 and lower, then the yield potential can be lower by up to 20% in grass.

However for Peaty soils, you should aim for 5.3 – 5.5.

When to Lime?

Ground lime, which is naturally occurring takes time to work in that it does not raise the PH of your soil as soon as it is spread. General guidance for applying lime is to spread before ploughing in the autumn or spread after ploughing for spring crops.



Another option is granulated (prilled) lime which works very quickly to raise pH but may not last as long which can make it expensive compared to ground lime. However it can be useful to save a crop in the short term. It is usually finely ground calcium or magnesium limestone that has been processed in a similar way as fertiliser making it into a convenient liming product since it is easy to handle and can be spread without the need for specialised equipment.