

Understanding your soils

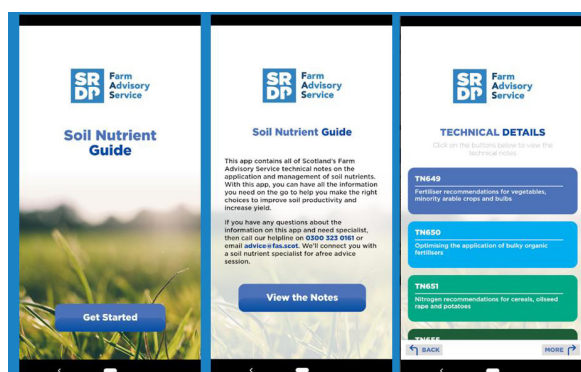
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Soils are the foundation on which Scottish agriculture is built. Understanding and managing your soils correctly is an essential part of running a successful farm business. The Farm Advisory Service has recently launched the Soil Nutrient Guide app that can be used to help you ensure make the most of your soils.

The Soil Nutrient Guide App has all of the technical notes on soil nutrient management at your fingertips. These technical notes can guide your decision making on farm to ensure you are maintaining and improving the productivity of your soil and in doing so increasing the sustainability of your farm business.

You can find links to the Apple and Google Play stores on our website to download the app here www.fas.scot/crops-soils/soils/soil-nutrient-guide-app

Soil management on a farm is ultimately the protection and enhancement of your soil resource to make sure your soil is working for you. This includes looking after both the physical and chemical attributes of your soil.



What are the big issues and what can be done?

There is much for farmers to consider when thinking about managing the physical attributes of their soil, erosion and soil biodiversity to name a few. However, soil compaction remains one of the most widespread structural issues on Scottish farms where soil management is concerned. A compacted soil will not produce as effectively as a non-compacted soil, hampering grass growth and crop yields, possibly leading to soil erosion and increased greenhouse gas emissions. There are many causes of compaction, trampling of livestock, for example near a trough, ploughing and other tillage practices etc. but one of the most common causes of compaction in Scotland is heavy machinery on wet and waterlogged ground. The best thing a farmer can do to avoid compaction is to restrict entry when conditions aren't right and making sure all contractors entering the farm are abiding. However, it may well be unavoidable at certain times that a farmer needs to enter a field when conditions are less than favourable, but little things like reducing the weight and tyre pressure of machinery can help to reduce the risk of compaction. Incorporating cover crops or leaving crop residues can also reduce the risk of a soil becoming compacted and in some cases deep rooted cover crops can help alleviate already compacted soils.

For more information on how you can avoid and reduce the risk of compaction and many more soils related issues or see what you can do to enhance your soil visit the Farm Advisory Service website.

The corner stone of all soil management is adequate soil sampling and analysis. Knowing the nutrient status of your soil allows for accurate application of nutrients which may save you money in bagged fertiliser costs. One of the most important yet sometimes overlooked aspects of your soil analysis is the pH and liming requirement. If your pH is too low or, in rare cases, too high it will limit the availability of nutrients in your soil. Getting your pH to the level that you need for the crop you are growing and your soil type is crucial to any nutrient management plan. Coming up with a liming plan to get your pH up to status should be high on the agenda to make sure you are getting value for money from your muck, slurry and bought in fertilisers. This is one of the major steps that can be taken in ensuring your soil is working for you and making the most of the nutrients you are applying. Soil Sampling should be carried out every 3-5 years to give you a good idea of progress and sampling should not occur within 2 years of a lime application.

This information and more can be gathered from technical note TN714 Liming materials and recommendations which can be found on the Soil Nutrient Guide app or on the Farm advisory service website.

If you need more advice on soil nutrient management or on any other topic, the Farm Advisory Service has a range of support and help available:

Advice line

For free telephone advice on a wide variety of topics including cross compliance, water framework directive requirements, climate change and other technical issues call us on 0300 323 0161 or email advice@fas.scot. The advice line operates between 9am and 5pm Monday to Friday.

Bespoke Advice and Grants

FAS can also help you to increase the profitability and sustainability of your farming business through Scottish Government grants including Integrated Land Management Plans (ILMPs) – worth up to £1,200. The ILMP will identify opportunities and cost savings for your business, based on an independent and confidential assessment of your business by an experienced farm business adviser of your choosing. As part of your plan you can choose to benefit from up to two further specialist advice plans.

Online

Our website contains articles, videos and much more at www.fas.scot