

## Soil Testing & Nutrient Management Plans

### Soil Testing - what is the requirement?

Rule 1 of the Farming Rules for Water requires soil testing to be carried out on **cultivated** agricultural land every 5 years. Soil pH and levels of nitrogen, phosphorus, magnesium and potassium should be determined. Fairly simple soil testing will give pH and levels of P, K and Mg. Nitrogen levels may be determined by assessing the soil nitrogen supply (SNS) using (for example) the AHDB Nutrient Management Guide (RB209) (<https://ahdb.org.uk/nutrient-management-guide-rb209>). Actual testing is recommended for fields which have had several years of significant applications of organic N, as this may result in highly variable levels.

The results of the soil testing should be used to plan fertiliser and manure applications so that these, plus the nutrients already in the soil, deliver economically optimum nutrition for your crops. If you have not sampled your soil within the last 5 years the Environment Agency may request that you carry out this task as part of a Farm Improvement Plan.

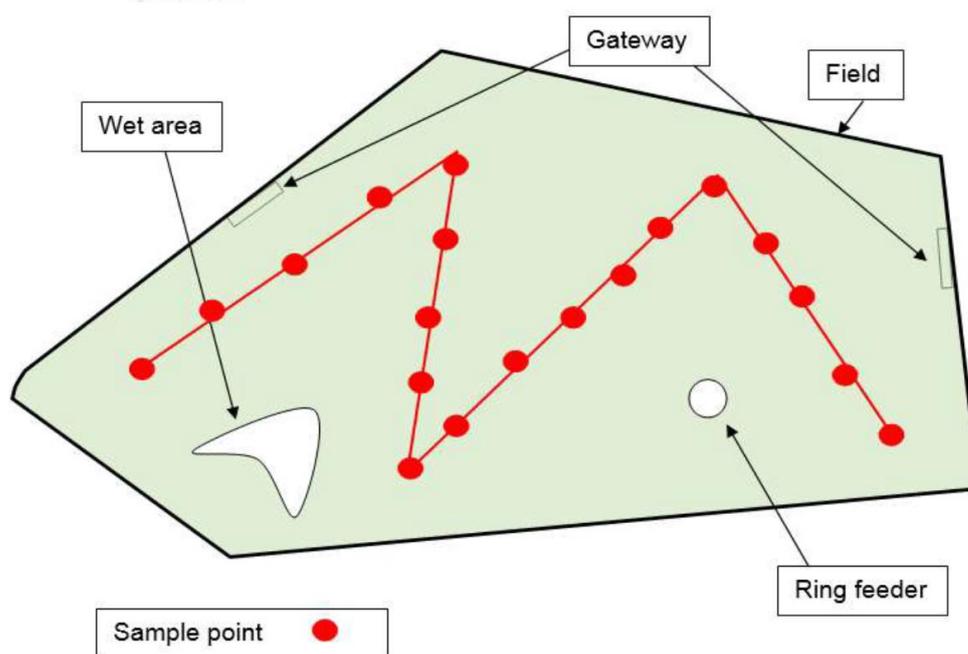
### What is cultivated land?

Cultivated agricultural land is land which is regularly cultivated by physical means (including ploughing or sowing) or by chemical means (including applying organic manure or manufactured fertiliser) within the last 3 years. Grassland, even if only ever grazed, that has bagged fertiliser or manures applied to it, would be classed as cultivated.

### How do I test my soil?

Use an auger or small trowel and excavate to a depth of 7.5cm (3 inches) for grass and 15cm (6 inches) for arable land. Avoid sampling near headlands, gateways, near hedges and unusual features. Place all the sample in a bucket. For each field take approximately 15 to 20 samples in W shape and place in same bucket.

Mix the soil well before taking a final sample of approximately 1 kg and place in a labelled bag or container (see a suggested sampling pattern below)



## **When is the best time of year to sample?**

The best time to sample is between autumn and early spring. Aim to sample 2 to 3 months after N organic manure applications and not within 6 months of lime and fertiliser applications

## **Where can I have my soil tested?**

There are numerous commercial laboratories that can provide a soil sampling service. The Tried and Tested Professional Nutrient Management website lists a number of providers at:-

<http://www.nutrientmanagement.org/what-we-do/support-and-advice/find-a-laboratory/>

<https://www.soilassociation.org/farmers-growers/technicalinformation/improve-your-soil/soil-testing-companies/>

The DEFRA group utilise NRM Laboratories at

<https://www.cawoodscientific.uk.com/nrm/services/agriculture/>

## **Where do I record the results?**

Nutrient Management Plans with “field record sheets” are the ideal location for recording your soil analysis results, and you can also record what you plan to do and when, in terms of nutrient applications via manures, slurries and inorganic fertilisers.

An example of a good one of these is on page 10 at

[http://www.nutrientmanagement.org/tried-and-tested/nfu-nutrient-management-plans-booklet-a4-20pp\\_we/](http://www.nutrientmanagement.org/tried-and-tested/nfu-nutrient-management-plans-booklet-a4-20pp_we/)