# Nutrient management for your farm business





Championing the Farmed Environment (CFE) is encouraging farmers and land managers across England to protect and enhance the environmental value of farmland, through measures that sit alongside productive agriculture.

CFE helps farmers and land managers choose the right environmental measures; put them in the right place and manage them in the right way – to protect soil, water and air quality and benefit wildlife.

CFE is a partnership approach supported by many organisations engaged in agriculture and the environment. The work of CFE demonstrates how voluntary industry-led initiatives can collectively take responsibility for addressing environmental issues alongside profitable farming.

CFE's partner initiative, **Tried & Tested**, aims to help farmers find the right level of guidance. Through its website (www. nutrientmanagement.org), **Tried & Tested** provides tools and resources to assist farmers and their advisers to improve whole farm nutrient management in an environmentally friendly, cost effective and practical way.

**Tried & Tested** can help your decision-making process and act as a prompt to make step-by-step, continual improvements in managing nutrients and getting the best performance from your business, including your crops, grass and livestock.

Knowing the nutrient and pH status of soils is not just about working out how much fertiliser to apply, but is about planning and ensuring that soil fertility is balanced and that soil condition does not constrain nutrient uptake. Compacted or fragile soils limit the capacity for rooting and crop nutrient uptake.

If pH or any major nutrient (phosphate, potassium, sulphur, magnesium and calcium) are limiting, or out of balance, then any nitrogen or phosphorus applied may not be used efficiently by the crop. This not only reduces crop performance but may increase the risk of surplus application. Excess nitrogen is lost as nitrate to water and/or as ammonia and nitrous oxide to air. Similarly, surplus phosphorus may be lost. Getting the right nutrient balance has several advantages, providing business benefits and helping to meet national targets for both water and air quality. Soil testing is key to them all.

#### The essential benefits of nutrient management

- 1. Farm productivity hinges on the nutrient availability
- 2. This depends on many factors: soil type, pH, climate, rotation and farm type, so it's important to regularly test soils for key nutrients and to evaluate soil structure as well as organic matter levels
- **3.**Seek expert up-to-date advice and/or guidance on how to interpret soil analyses and improve the efficiency of nutrient use. This will enhance farm profitability and protect the environment

# Do you routinely sample and test your soils?



- Use one of the UK soil laboratories who participate in a proficiency testing scheme
- Act on results
- Build-up or run down soil indices (Usually, Index 2 for P and K is optimal)
- Check soil structure

PAAG • Professional Agricultural Analysis Group

## Do you need training, crop or feed advice?



- Seek training and CPD opportunities
- Check your crop adviser is a currently accredited as a FACTS Qualified Adviser – no less
- Check your feed adviser is a FAR Adviser – no less



#### Do you know where to find advice & support for nutrient management?

- Code of Good Agricultural Practice
- PLANET (Planning Land Applications of Nutrients for Efficiency and the Environment)
- MANNER-NPK
- The Environment Agency 'Key actions for farmers relating to water management' (bit. ly/EAkeyactions)



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- Catchment
  Sensitive Farming and CSF grants
- Your local Environment Agency office Tel. 03708 506506
- What's in Your Backyard (WYBY) for Farmers

### **THREE SIMPLE STEPS**



#### 1. MEASURE and manage your soils

There is no substitute for regularly examining soil condition in order to maintain its long-term physical, chemical and biological health. For chemical analysis, it is recommended that soil fertility is tested every 3-5 years and all soils are assessed for soil structure to ensure there are no limiting factors, such as compaction that might compromise nutrient uptake and production. The CFE 'Soil management for your farm business' and LEAF's Simply Sustainable Soils guides cover more detailed guidance on good management of soils.

#### 2. THINK about training and professional advice

FACTS supports training and qualifications in crop nutrition for farmers and FACTS Qualified Advisers. Through regular updates and Continuing Professional Development, FACTS ensures the farming industry is kept up-to-date.

As well as providing information on the technical elements of nutrient management and good agronomy for crops and grassland, FACTS also guides industry on key policy issues which drive changes in the way all nutrient sources are stored, applied and accounted for.

The Feed Adviser Register (FAR) recognises standards in animal feed



advice. Advisers on the Register can help farmers to improve feed efficiencies and so reduce the risk of nutrient loss from production systems.

#### 3. PLAN with recognised guidelines and tools

Good nutrient management is central to optimal production and environmental compliance. Both farmers and advisers have essential publications to rely on (e.g. *The Fertiliser Manual*, Tried & Tested planning tools) which support decision-making through the season. Using established and recommended approaches is likely to give positive results for the farm productivity and can help demonstrate that legal obligations are being met.

Pick the guides, services, tools and advice for optimising productivity and reducing pressure on water and air. Tried & Tested can provide free basic toolkit items, in paper or electronic format, full details on the website (www.nutrientmanagement.org.uk).

### Do you have and use a Nutrient Management Plan?





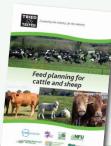
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- Think about links between soil, manures, fertilisers and, if applicable, feed plans
- Plan activities, based on measurements and calculations
- Carry-out and record operations on field and farm sheets

## Do you have and use a Feed Plan?



- Think about links between nutrients in soils, manures, grass and forage crops, and bought in feeds
- Plan activities based on monitoring and assessment
- Carry out and record operations on balance sheets for each animal species



#### Do you use Think Manures?



• Provide adequate storage

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- Decide when and where to spread
- Spread accurately and evenly
- Think Manures (bit.ly/ttmanures)

### Working in partnership

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CFE is a partnership approach supported by many organisations engaged in agriculture and the environment.

All recognise the importance of managing the farmed environment. By working together with CFE, a number of voluntary, industry-led initiatives demonstrate how the industry is stepping up to promote and support good environmental management on farm.

#### Web: www.cfeonline.org.uk

#### Twitter: @cfeonline



#### Promoting responsible pesticide use

The Voluntary Initiative (VI) promotes responsible pesticide use by encouraging operator training through NRoSO, sprayer testing via NSTS and careful management of pesticides using an integrated approach supported by BASIS registered advice.

#### www.voluntaryinitiative.org.uk



Tried & Tested, (created by the industry for the industry), provides tools and resources designed to assist farmers and their advisers in improving farm nutrient management in an environmentally friendly, cost effective and practical way.

#### www.nutrientmanagement.org



The industry-wide Greenhouse Gas Action Plan (GHGAP) for agriculture focuses on improving resource use efficiency in order to enhance business performance whilst reducing GHG emissions from farming.



### This guide outlines good practice that should be used for managing nutrients.

Many of the measures in this guide will provide significant benefits for other farm wildlife, as well as protecting soil and water. Further advice is available in other CFE guides. These are available on the CFE website or from your local CFE coordinator and include:

- Conservation management advice for your arable business
- Conservation management advice for your livestock business
- Soil management for your farm business
- Managing soils for a sustainable future
- Pollinator management for your farm business

#### **Image credits**

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