



## Rural Roundup podcast: Whole Farm Plan

**What is the Whole Farm Plan?**  
In this episode of Rural Roundup, host Kerry Hammond is joined by George Chalmers & Tiffany Stephenson to talk about The Whole Farm Plan, and what it means for farmers, crofters & smallholders. They speak about what the Whole Farm Plan is, the benefits, and key dates.

To find this episode, scan the QR code below or visit [www.fas.scot/sounds](http://www.fas.scot/sounds)



**Key dates to remember**

**30th August 2024**  
Revised closing date for the June Census 2024

**1st September 2024**  
Scottish Upland Support Scheme Application window closes

## Optimising soil quality for establishing a grass sward

Soil fertility is critical to the success of any newly sown grass sward. Soil samples should be taken routinely every 3-5 years and ideally at least 12 months in advance of sowing a new sward to ensure that if applications of lime, phosphate or potash are needed. There will then be sufficient time for these to be made and for them to take effect.



### Soil pH

The availability of nutrients, levels of biological activity in soils and success of many crops are dictated by the acidity of the topsoil. Maintaining optimum pH in topsoil is critical in achieving optimum yield, forage quality and preventing losses of nutrients to the environment. The target for soil pH for mineral soil is 6 - 6.2, and for peaty soil is 5.3 - 5.5.

Applications to increase soil pH should be made at least 6 months in advance of sowing a new crop to allow time for soil levels to increase and liming should be completed before any phosphate applications to limit phosphate lock up.

### Phosphate and potassium

The target soil status for phosphate and potash in grassland is moderate (M-/+). Recommendations for P & K applications for grass establishment are shown in Table A below:

Table A. Potash and potassium recommendations for grass establishment (autumn or spring sown) in kg/ha

Grass management	P <sub>2</sub> O <sub>5</sub>				K <sub>2</sub> O			
	Soil P Status				Soil K Status			
	V. Low	Low	Med	High	V. Low	Low	Med.	High
Grass with high clover, red clover	150	110	70	50	130	90	70	40
All other grass management options	130	90	50	30	110	70	50	20

Additional P & K will be required where soil status is Low or Very Low and rates can be reduced where a status may be High.

When calculating the amount of phosphate required the Phosphate Sorption Capacity (PSC) should be considered. The PSC varies depending on soil texture, soil chemistry, soil pH and organic matter levels - it reflects the ability for differing soils to bind with applied phosphate. Table B shows below:

Table B. Effects of PSC on annual fertiliser adjustments (kg P<sub>2</sub>O<sub>5</sub> /ha)

P sorption capacity	Soil P Status				
	Very Low (VL)	Low (L)	Mod (M-)	Mod (M+)	High (H)
PSC 1	+40	+20	0	-10	-20
PSC 2	+60	+30	0	-20	-30
PSC 3	+80	+40	+20	0	-40

For example, a moderate status soil with high clover content and classed as PSC3 would require 70kg of P205 (Table A) plus an additional 20kg (Table B).

*Lorna Galloway, SAC Consulting*

For the full article and more technical information, please visit: [www.fas.scot/article/how-to-establish-a-ryegrass-ley/](http://www.fas.scot/article/how-to-establish-a-ryegrass-ley/)



## Free Events

At the Farm Advisory Service we run a range of events both online and in-person.

Visit [www.fas.scot/events](http://www.fas.scot/events) to sign up or contact the advice line and we'll help you get booked on.

**Farm Wildlife Walks - Berwickshire**  
Chirnside, 14th August, 9:00am - 11:30am

**Farm Wildlife Walks - Dumfries**  
Thornhill, 19th August, 1:00pm - 3:00pm

**Test Before You Treat - St Boswells**  
Hawick, 20th August, 8:45am - 10:45am

**Management and Selection of Tups for Efficiency Webinar**  
Online, 20th August, 7:30pm - 8:30pm

## Using precision agriculture on grassland and livestock farms

With the rise in input costs and increasing pressure on the agricultural industry to reduce its carbon footprint, the data generated by precision technology is being more and more to help reduce inputs, increase efficiency, and make more informed management decisions. Historically precision technology and has been largely focused with arable cropping but the technology is now being used more and more for the grassland/ livestock sector.



### Improved efficiencies

- Variable rate lime application:** Will reduce lime requirements, lime costs, and improve carbon footprint.
- Variable rate seeding:** By targeting higher seed rates where soil types are more favourable will help to increase overall yield.
- Variable rate fertiliser application:** Will reduce fertiliser requirements, reduce input costs, produce a more uniform crop which is easier to harvest thus reducing fuel and operator fatigue. Overall reduction in carbon footprint.
- Manure constituent sensing:** More precise application of organic fertilisers resulting in reduced inorganic fertiliser inputs.
- Camera aided herbicide application:** Spot spraying of weeds using smart cameras which are mounted on a spray boom and trained to recognise target weeds claim to reduce herbicide use by up to 85% compared with blanket use.
- Yield mapping:** Enables a more targeted approach to input applications based on historical yields meaning reduced input costs.
- Real time constituent analysis of forage/grain:** Improved forage/grain quality resulting in improved performance and less concentrates used / improved chances of attaining milling quality grain.
- Remote machine monitoring:** Enables correct set up of machinery and so reduces fuel consumption.

### Disadvantages of using precision agriculture

One of the main disadvantages of using precision agriculture is the cost of the tech-enabled equipment and the technology platforms used to deal with data generated. The amount of data generated by the precision equipment can be overwhelming and many farmers don't have the time or knowledge to understand and analyse it.

*David Darlington, SAC Consulting*

For the full article, please visit:

[www.fas.scot/article/using-precision-data-on-grassland-and-livestock-farms/](http://www.fas.scot/article/using-precision-data-on-grassland-and-livestock-farms/)

Scotland's Farm Advisory Service is funded by the Scottish Government. It is delivered by SAC Consulting, part of Scotland's Rural College, and Ricardo Energy and Environment.



**National Advice Hub**  
T: 0300 323 0161  
E: [advice@fas.scot](mailto:advice@fas.scot)  
W: [www.fas.scot](http://www.fas.scot)

If you need more advice on any 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](mailto: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 £2,000.

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](http://www.fas.scot)



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