

Raising awareness

Introductory Presentation Theme 1: Strategies and stakeholders involvement for reduction of diffuse pollution.

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SAC Consulting is a division of SRUC

Leading the way in Agriculture and Rural Research, Education and Consulting

Diffuse pollution from agricultural activities

- Impact on Scotland's water quality
- No one wants to pollute...but diffuse pollution (DP) from agriculture is often 'invisible' and the impacts occur 'off-farm'
- Farmers under other pressures – DP not top of their list
- DP GBRs - Need to make it easy to highlight how farmers stay within the rules and reduce pollution risks
- Further challenged by wet weather and farm finances



Information to support pollution reduction

- Diffuse Pollution General Binding Rules introduced in 2008
- Range of good practice information available
- Series of leaflets produced when GRBs introduced and campaign in farming press
- Still finding farmers who hadn't heard of them/didn't know about them
- **How do you raise awareness and promote action?**



Promoting 'the rules'

- No single approach to influencing behaviour is likely to be sufficient (Blackstock *et al*, 2011)
- Need to identify and appeal to different motivational drivers, e.g.
 - Keeping on the right side of the regulations
 - Financial
 - Legacy
 - Environmental
 - Being seen as a 'good farmer'



No two farms (or farmers) are the same



- *I've never really been interested in sitting in front of a computer at the end of the day. My wife does the bookkeeping and any of the other admin work, so I don't really have a reason to use the computer. I help the kids out with their homework but I don't want to sit in front of the thing for any longer than I have to"*
- *"Farmers are using satellites, laptops and smartphones in their tractors and turning them into mobile offices. They're tweeting with other farmers about plantings, crop yields and weather..."*

(Stocks, 2011).

Reducing the risk of diffuse pollution

Farmers told us they ‘...*just wanted to know what the rules were...*’

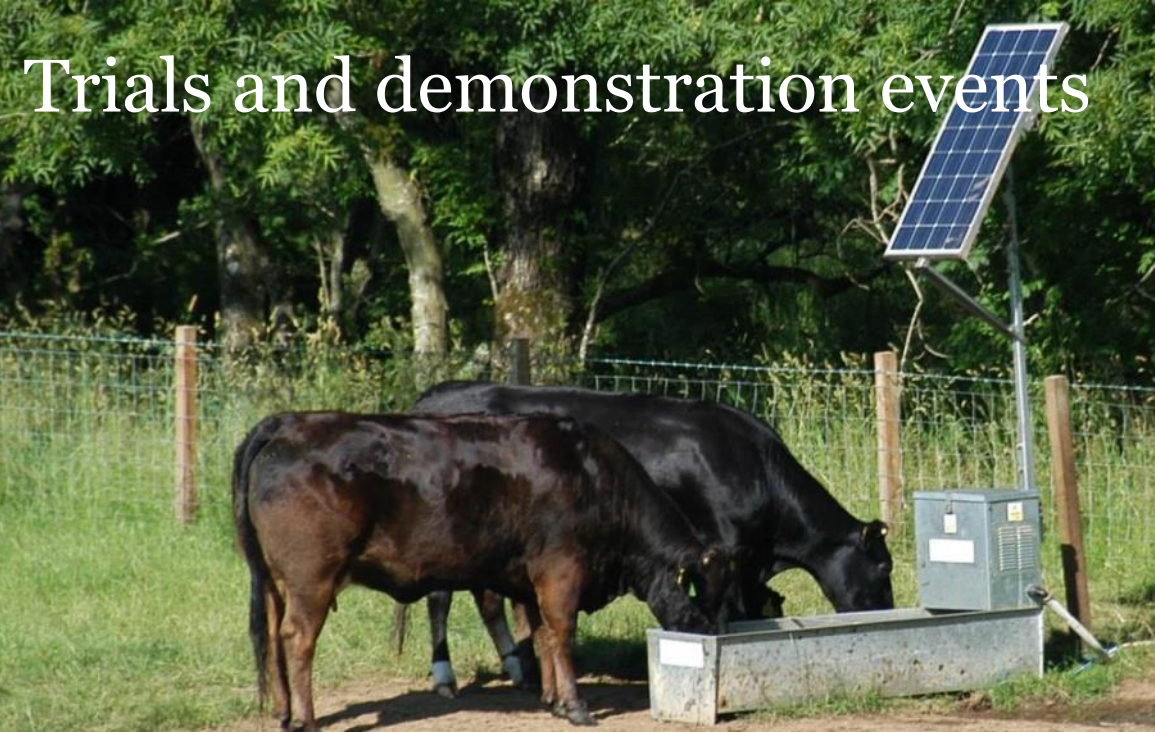
How could we help with this?



Farmer events and workshops



Trials and demonstration events



Printed media

- 90% of farmers still rely on farming media for their information needs (Agridata, 2011).

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CAP IN THE MISTERY

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POLICY NEWS

Good soil management

This is the fourth of a series of specially produced articles designed to help our members understand the likely impacts and opportunities of Climate Change on Scottish agriculture. In this article, SRUC's Alex Sinclair examines how farmers can assist their business and sustain the environment via good nutrient management.

It is the easy task of adjusting optimum crop yields with maximum environmental impact. In fact, as there are an estimated 100 million hectares of available plant resources in soil with the correct balance of crop nutrients and soil fertility. This article explains the principles of the process, offers advice on soil fertility, explains how to reduce the risk to the system. Crop yields have been an added concern and by getting it right, many crops down have increased in yield from the 1950s and 1960s. However, the use of fertiliser and other inputs has increased, and the need to check soil nutrient levels is now essential for good agricultural production.

Correct decisions on economic optimum crop yields and nutrients

- Take account of nitrogen and crop yields
- Consider market responses to quality of the product
- Voluntary action to improve the quality of the product
- Assessment of available nutrients from organic manures
- Apply manures to the soil
- Make use of manure analysis on-farm and
- Calculate available nutrient based on application

Slurry and manure analysis

At least 40 per cent of the readily available nitrogen content of manure is lost to the atmosphere as ammonia gas. This loss can be reduced by covering the manure with a layer of soil or straw. This can be done by spreading the manure in a windrow and covering it with a layer of soil or straw. This can be done by spreading the manure in a windrow and covering it with a layer of soil or straw.

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POLICY NEWS

A slurry of activity

Innovation by the British Environmental Protection Agency (BEPA) has led to a revolutionary change in the way that slurry is spread on farms. The new system has been developed by the Scottish Agricultural College (SAC) and is being used by farmers across Scotland.

MUCH OF A GOOD THING HAS ITS COSTS

The new slurry spreading system has been developed by the Scottish Agricultural College (SAC) and is being used by farmers across Scotland. The system is designed to reduce the risk of ammonia loss and improve the efficiency of slurry application.

Accurate application of fertilisers and manures

- Regularly test soil and manure samples
- Regularly check and maintain manure spreaders

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SEPA ON THE GROUND AT A

The Scottish Environment Protection Agency (SEPA) is working to improve the way that slurry is spread on farms. The agency is providing support to farmers to help them reduce the risk of ammonia loss and improve the efficiency of slurry application.

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Tractor sticker

- Simple reminder of the legal minimum working distances around watercourse



Mind the Gap Minimum legal working distances from watercourses

Within 2m of watercourse	Within 5m of a watercourse	Within 5m of spring, well or borehole*	Within 10m of a watercourse	Within 50m of a spring, well or borehole*
2_m	5_m	5_m	10_m	50_m
<ul style="list-style-type: none">• No application of inorganic fertiliser• No cultivation (2m from top of bank)	<ul style="list-style-type: none">• Prevent significant poaching	<ul style="list-style-type: none">• No fertiliser application• No cultivation• No livestock	<ul style="list-style-type: none">• No slurry or manure application• No storage of fertilisers (including temporary field middens)• No livestock feeders	<ul style="list-style-type: none">• No storage of fertilisers (including temporary field middens)• No slurry or manure application

** refers to any spring which supplies water for human consumption or any well or borehole that is not capped to prevent water ingress*

In the event of a pollution incident, contact the SEPA Pollution Helpline on **0800 80 70 60** For more information on diffuse pollution and how you can reduce risks and benefit the farm business, see www.farmingandwaterscotland.org

The Scottish Government SRUC NFU Scotland SEPA dpmag
Funded by the Scottish Government as part of its Pollution Prevention Advisory Activity.

- Stick in tractor cab, office etc

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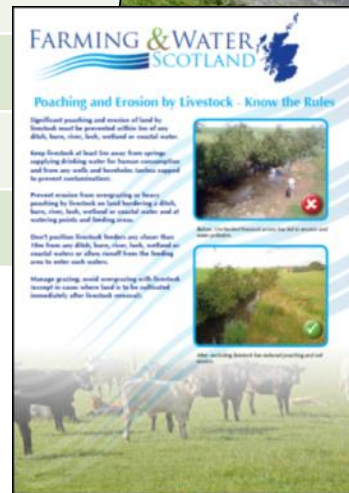
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Know the Rules Guides

No.	Topic
1	Introduction to diffuse pollution – What is it and why is it a problem?
2	Steading drainage
3	Slurry and manures
4	Inorganic fertiliser
5	Poaching and erosion by livestock
6	Soils and cultivation
7	Purchase and storage of pesticides
8	Pesticide use
9	Sheep dip



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Farming & Water Scotland

Our website provides ideas, information and contacts to help you reduce diffuse pollution risks from your farm and benefit the farm business.

Reducing diffuse pollution risks can benefit your business in a number of ways, for example making better use of nutrients in slurry and manure or an improvement in livestock health through cleaner drinking water supplies.

It can also help you to stay on the right side of the Regulations and protect farm payments, whilst protecting surrounding water quality.

Further information and links.



Diffuse Pollution



Soils & Nutrients



Livestock



Arable



Scotland's Water



PEPFAA Code



Funding & Grants



Know the Rules



Diffuse pollution reduction

- Still a lot to do
- What other strategies and tools can we consider?
- How do we increase stakeholder involvement?



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