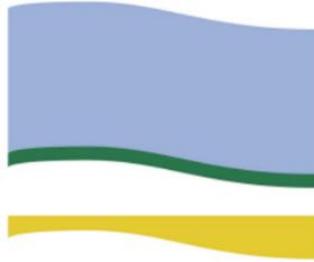


Isle of Wight Catchment Sensitive Farming Summer 2022



Isle of Wight
area of outstanding
natural beauty

Welcome

We are all at the mercy of the weather, me too! So, in preparation for a soil sampling event this month (May) pits had to be dug in advance to expose the soil profile. I struggled as the ground was like concrete but (inevitably?) it rained on the day. Too late, but much needed to improve soil moisture.



When in a hole...

The event was led by Ian Robertson of **Sustainable Soil Management** and four farms were visited on the day with the results of an autumn soil sampling discussed. The samples were not assessed for the usual minimal range of components. Instead, there is detailed information to provide soil and foliar management recommendations and the state of organic matter and organic carbon. An analysis of Calcium, Magnesium, Potassium, Sodium etc. will tell you if these elements are in deficit and what are the amounts in the soil reserves. The quantities of trace elements are determined and compared against the recommended ranges. All this chemistry is fine, but it needs interpretation and that is one of Ian's strengths. Without a clear understanding of how these various elements interact and what action is needed to boost crop production, inputs can be somewhat hit and miss or just a waste of money. Advice on inputs from any source can of course be swayed if there's a sale and commission connected to those recommendations!

Along with chemistry there's soil structure to consider but of course the two are linked irrespective of how the soil is treated by cultivations etc. The third key component of soil is biology. A measure of the bacteria, fungi and protozoa can be indicated by the presence of phospholipid fatty acids. At all four farms a PFLA test was completed revealing the microbial biomass and the variation in ratios of fungi to bacteria, and gram +ve to gram-ve bacteria. A measure of PLFA diversity for example, as determined by the test, can indicate the stability and resilience of soil. Disturbance, lack of diverse input from food sources and an intensive crop rotation can decrease diversity. But what one might ask is the point of knowing the measure of protozoa on your soil? These single cell micro-organisms make nutrients available to the plant by "grazing" on other microorganisms (mainly bacteria). If your soil is short of protozoa your crop is less able to thrive.

What is the message of the soil event? Firstly, detailed soil sampling is a wise investment. It can save a fortune by knowing what is required to maximise production. This doesn't necessarily mean what inputs are required. It could be, as we found at some farms on the day, that inorganic fertiliser is not required but mechanical aeration of pasture is the answer. Secondly, be sure to differentiate recommendations from those analysing soil and those analysing soil and selling something. Apologies if that's not too obvious. Thirdly, do not overlook soil biology it's critical to the long-term ability of your farm to grow food. Every farm should have soil health as its number one consideration. Crops need healthy soil not 'dirt' - there is a difference. Also, bear in mind that under the **Farming rules for Water** there is a requirement to...

..demonstrate that they (landowners) have planned applications of organic manure or inorganic fertiliser. This includes for example, a nutrient management plan or other written plan.

and...

...show an assessment of the crop nutrient requirement for each cultivated land parcel that should be informed by, (for example), ...results of soil sampling and analysis.

Slurry

Government support for the management of slurry is expected to be announced in the autumn but, what are the problems with the current storage and uses?

When managed effectively it's a valuable organic manure but has the potential to cause serious pollution to air (through ammonia, methane and nitrous oxide emissions), water (nitrate and phosphorus loss to rivers and waterways) and soil health.

It's unfortunate that there has been historic under-investment in slurry systems and the regulations have not always been followed to the letter. Where the valuable nutrients from slurry are 'lost' to the environment that's an avoidable waste of resources and not good for Island rivers and wetlands.

To date, Defra have offered help to manage slurry:

- **Slurry equipment:** the first round of the Farming Equipment and Technology Fund (the small grants part of the Farming Investment Fund) offered funding for the best available slurry techniques, including separators and low-emission spreaders.
- **Slurry acidification:** In January 2022 there was a new offer for slurry acidification projects, under the Improving Farm Productivity strand of the Farming Transformation Fund.

In autumn 2022 it seems probable that the grants will focus on storage but we await that announcement from Defra.

Free Expert Advice

Via your Catchment Sensitive Farming Officer Island farmers can benefit from a completely free range of advisory visit by ADAS. Reports by these external consultants are owned by the farm and are entirely confidential. They can cover anything from an assessment of the farm infrastructure through to slurry/manure sampling and analysis and, soil & nutrient management planning. These are just examples from a list of around 30 consultancy visits.

Farming in Protected Landscapes - This grant scheme, administered by the Island's Area of Outstanding Natural Beauty (AONB), is continuing to roll out funding for a wide range of farm-based projects. Funding will continue in 2022/23 and the next financial year. A high uptake will confirm to Defra that farmers are keen to support environmental management across the Island's landscape.

See...

<https://www.wightaonb.org.uk/farming-in-protected-landscapes/>

...where the application form can be completed or printed for posting to the AONB.

CSF can arrange a completely free visit by qualified external consultants to advise on soil and nutrient management planning, slurry/manure handling storage, machinery testing and calibration (fertiliser and manure spreaders), soil sampling and slurry/manure sampling and analysis. Contact us for further details.

Catchment Sensitive Farming

For a free advisory farm visit
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This Newsletter is being provided to through a partnership between Natural England and the Isle of Wight Area of Outstanding Natural Beauty (AONB) for the purpose of delivering Catchment Sensitive Farming. The AONB take looking after your data as seriously as we take looking after the environment. Your data is only used by us so we can email, call, write or text you about our Catchment Sensitive Farming work. This will include free advice, access to grants, events and campaigns.

We hope you want to hear from us, but you can change your preferences or mind at any time by emailing **mark.simmons@iow.gov.uk**

Please provide your contact details and tick how you would like to be contacted by the Isle of Wight for Catchment Sensitive Farming partnership or Natural England below:

- You can contact me by phone/mobile:
- You can contact me by email:
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