



Farmer Focus: DJ Hurley, Dairy Farmer

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Edited by
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On visiting DJ Hurley's beautifully laid out dairy farm in the heart of the Timoleague catchment on a wet and windy afternoon, I got a sense of how difficult it has been for farmers. It has indeed been a very wet month of March down here in West Cork.



Summer time in Timoleague

For DJ the busiest weeks this year were the last week of February and the first week of March. With 90 percent of cows calved on DJ's farm by the time of my visit, I could understand why he is getting eager for the weather to dry up and utilise some of the rich spring grass which is visibly present on his platform. Calving started around 20 January and as DJ described, February's grazing conditions were almost ideal then - there was "dust rising" in late February. This allowed cows to get out, day and night.

Getting some high quality grass into cows helped considerably with the workload associated with

managing those freshly calved cows in February, and even get some of the heavy covers that presented after winter to be grazed.

In February when conditions have allowed, DJ carefully applied slurry using LESS, utilising recent soil samples and the nutrient management plan prepared as part of the farm's Nitrates Derogation. This, DJ believes, helps to kick-start the pasture to work for the grazing year regenerating its covers with some rich, fresh spring leaves. It leaves the farm with a super source of feed for the latter half of the first rotation and the start of the second rotation around the end of March.



Installation of Lysimeters in 2022 on DJ's farm - part of the ACP soil solution monitoring

But as often is the case with best laid plans, and as DJ found out in 2021 and right at the worst time possible, with Covid restrictions and calves just hitting the ground, he had a slip. He

broke his arm, and adjustments had to be made - neighbours, family and friends all rallied around to keep the show on the road as good as ever before. As always, the farmer has to be flexible and plan for many scenarios.

Luckily in DJ's case for the remainder of this extended winter period due to unfavourable weather conditions, there is enough silage to feed the animals after having to house them almost full-time in recent weeks now. As DJ said on the day "you will not get two years the same;

March is always changeable but this year has seen rain from start to finish."

Luckily that weather wasn't the case for DJ the year he had the added complication of an injury. As he hops up on his very nicely kept New Holland tractor and loader before going off to bring in the cows, we all await what the rest of 2023 has in store for us - bring on sunshine and showers to keep the grass green and make sure May flowers.

Digging into Soil Nutrients

Ognjen Zurovec, Soil Scientist

As soil surveys improve both water quality and farming efficiency, the ACP has been surveying soil nutrient levels in catchment areas since its establishment in 2008. This has yielded important scientific findings about how nutrients like nitrogen (N) and phosphorus (P) end up in both surface water and groundwater. These surveys have also shown that nutrient levels can vary widely across and within catchments, depending on soil type, land use and farming practices. See infographic on page 4.

By identifying these variations, targeted strategies can be developed to reduce nutrient losses and improve water quality. Also, by providing detailed information about the nutrient levels in their fields, farmers can use this information to develop nutrient management plans tailored to their specific needs and circumstances, reducing their environmental impact and improving farming efficiency.

The Irish farming sector has undergone significant changes since the establishment of the ACP about fifteen years ago, such as the abolition of milking quotas and the introduction of new policies and regulations aimed at

promoting sustainable farming practices. These changes have been reflected in the nutrient levels and fertility of soils in four catchments, as shown in the graphic on the last page.

While there are positives to report, such as an increase in the area of soils with optimal pH and good overall fertility, there are also concerning trends, such as the almost unchanged areas with excessive P content and an increase in P-deficient soils.



Completion of the soil sampling campaign in our Monaghan catchment earlier this year

One of the factors contributing to these negative P trends lies in the way practices have been carried out historically on a farm, for example slurry application on fields close to the farmyard.

To avoid nutrient imbalances, farmers can take measures like managing fertiliser distribution carefully and understanding the significance of nutrient planning. As a result, redistributing

fertiliser P inputs to soils within the farm that have lower status can increase the efficiency of P use and decrease the likelihood of P loss to surface water.

CAP and Satellite Monitoring

Edward Burgess, Agricultural Catchment Specialist

This year sees the start of a new system of direct payments to farmers from Europe under the Common Agricultural Policy (CAP). The Basic Payment Scheme and Greening are no more, and have been replaced with BISS, Eco-Schemes and CRISS. For tillage farmers the Straw Incorporation Measure (SIM) and Protein Scheme remain relatively unchanged.



Courtesy: European Space Agency

Changes to CAP are not confined to the schemes themselves, but also include how farming activity is monitored and inspected. New technologies being used to implement an Area Monitoring System (AMS) include satellite imagery and geotagged photos. These enable much greater coverage (all fields and boundaries in the country), and at a very high frequency (every five days). This system of monitoring has been in place since 2021 for protein crops and is being expanded to include

all area-based activities from 2024.

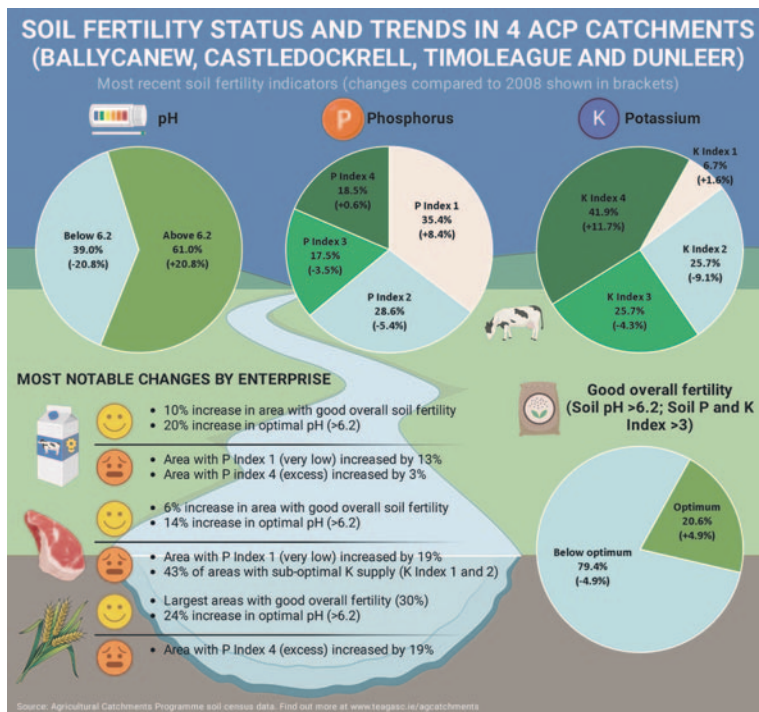
The imagery really is space age technology. Two separate satellite systems are being used, each having two satellites located opposite each other in the same orbit (180° apart), and each satellite takes approximately 100 minutes to orbit the earth.

The Sentinel-1 system use radar and microwaves, which allows it to “see” through cloud cover and at night, and can generate an image of your farm every six days regardless of the weather.

The Sentinel-2 system takes optical images and depending on cloud cover, it can take photos every 5-10 days. Each satellite weighs approximately 1.2 tonnes. The images are available to the public, and can be viewed at www.scihub.copernicus.eu

The nature of inspections and penalties might understandably lead you to think about this use of technology in a negative way, but this may well not be the case. The new Area Monitoring System will greatly reduce the number of on farm inspections. In addition, an associated alert system will notify farmers of innocent and obvious errors, allowing for corrections to be made with no penalty.

Soil Fertility Status and Trends in Four Catchments



Two Upcoming Events This Year

Tom O'Connell, Communications Officer

Open day in Timoleague Catchment - 12 May

All are welcome to this public event showcasing the work of the programme in our Cork catchment. For more details please contact Oisín or myself.

Catchment Science Conference 7-9 November

Our fourth catchment science conference takes place in Wexford and we are seeking farmer speakers.

Produced for the over 300 farmers in the Agricultural Catchments Programme.

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available at www.teagasc.ie/agcatchments

Please feel free to contact Tom on 087 0609620 or tom.oconnell@teagasc.ie for further information and also with any suggestions for future issues.