



GrassCheck GB farmer case study

Richard Rees, Penmaen Bach, Pennal, Machynlleth

April 2024

Farm facts

Penmaen Bach is a 60ha, mostly low-land farm located near Pennal and the Dyfi estuary in south Gwynedd, mid Wales. It includes 30ha of rough grazing.

The family farm is run by brothers Richard and Huw Llyr Rees who keep a flock of 400 Aberfield cross ewes to Abermax rams. The aim is to finish all lambs off grass on a rotational grazing system incorporating chicory and plantain. The farm is trying to keep costs as low as possible by emphasising grass production and root crop use for wintering.

As with most farms, the autumn and winter periods are the most challenging times of the year for grazing.

GrassCheckGB involvement

Richard, a former agriculture student at Llysfasi and Aberystwyth University, joined GrassCheckGB in 2022. He has always been interested in managed grazing and was keen to put his knowledge into practice to improve the farm business.



Penmaen Bach's location means that it is a farm where grass grows well. Their rotational grazing system involves changing between daily and two-day shifts, but this system is adapted according to demand from the stock and grass availability and quality.

The brothers were finding that fattening lambs off grass was becoming more and more problematic, despite undertaking Faecal Egg Count (FEC) tests and treating as and if needed.

Richard explained: "Our initial thought was that we had issues with minerals and nutrients in the soil. So, when we heard about the project, we jumped at the chance to participate and analysed our minerals."

All fields on the 220-acre farm were sampled and sent for analysis via GrasscheckGB. This revealed that there was no cobalt active in the 150 acres of lower ground on the farm nor the 75 acres of rough grazing soil. In addition, there were further low deficiencies of selenium, iodine and zinc in the fields.

Richard continued: "We immediately set to remedy the issue, by introducing boluses to the flock at the end of 2022."



“In addition, we have been regularly measuring grass growth, which is very easy to fit into the routine as it means sampling for quality analysis or the herbage – rotational grazing itself makes this easier as we are not always dealing with low covers.”

Benefits to the business since joining GrassCheckGB

The farm has seen an annual saving of £4,000 as a result of the analysis undertaken. Feed concentrates for the Aberfield X Abermax lambs was withdrawn in 2023, due to making better use of grass.

Richard said: “This year’s lamb sales have seen a huge improvement. We finished taking the lambs off grass in September this year - an average 55 days earlier than in previous years - and they were fattened without any concentrates. We’re delighted with the results.”

He added: “The project has helped us to significantly reduce inputs and maintain production to finish lambs with no creep feed – they are all finished off grazing swards. Mineral in-balance has been corrected after it was identified through GrassCheckGB.

“We are consistently growing 8tDM/ha, which hasn’t changed, but we have stopped using Nitrogen fertiliser and by the grazing management are still growing and using the same amount of grass.”

They are keen to further improve soil health and activity and feel that successful grazing management will have long-term benefits.



Key learnings since joining GrassCheckGB

According to Richard, the improvements have come as a result of getting nutrition right, adjusting grazing to meet needs, and understanding how to reduce inputs and retain the same, if not better, performance.

He added: “I like managing the farm using useful data and the addition of weather records to the grass measurements and quality analysis helps to complete the picture, making it possible to make better decisions.

“All the data we obtain from our involvement in the project is useful and helps me to plan the grazing throughout the season, for example, moving between 1 and 2-day shifts depending on the grass growth.”