

Davy McCracken



Data crucial to show value of upland farmers and crofters

Earlier this month, I had the privilege of speaking at a symposium in Northern Ireland focused on sustainable upland livestock and habitat management.

Hosted jointly by CAFRE (College of Agriculture, Food and Rural Enterprise) and Teagasc (Ireland's Agriculture and Food Development Authority), it was intended to build bridges between Irish hill farmers grappling with shared challenges.

I spoke about some of the lessons from the Scottish uplands, drawing on decades of our research to offer practical strategies that could inform Irish hill farming.

Scotland's uplands mirror Ireland's in many ways - vast less-favoured areas where sheep systems dominate.

They punch above their weight in delivering public goods such as carbon storage and biodiversity.

However, climate volatility is no longer a future risk but rather a daily reality.

We are seeing prolonged droughts in summer followed by intense rainfall events in winter.

These patterns not only stress livestock systems but also accelerate soil degradation.

Our work shows that without adaptive management, these systems risk collapse.

Indeed, hill farming is no longer just about output but also building resilience. Integrating livestock grazing with habitat maintenance and restoration will be essential to achieving this.

Strategies for sustainable management must, therefore, be built around hill farming systems,



PLANNING FOR FUTURE: Research says that to build resilience hill farmers must integrate livestock grazing with habitat maintenance and restoration.

not despite them. And our research has shown this can be achieved in practice.

Existing and emerging technologies have an important role to play.

For example, we regard the use of a weigh-crate and auto-drafter as simply best practice for managing and collecting data from our sheep during handling events.

And we are now using tracking collars to monitor their movements and grazing patterns when they are out on the hill.

Sensors placed in the soil and above watercourses are also helping us measure soil temperature, moisture

content and water levels in real time.

Such innovations go beyond science for its own sake. They give hill farmers and crofters the information they need to make better management decisions, from adjusting grazing regimes to planning peatland restoration or new woodland establishment.

Importantly, they allow upland systems to be considered holistically, showing how livestock, moorlands, woodlands and peatlands can interact in mutually beneficial ways.

The principles are the same whether you are in the Scottish Highlands, the

Antrim Hills or the Kerry Mountains. Technology gives us the chance to understand these interactions in ways we could not have imagined even a decade ago.

But technology adoption lags in the uplands due to costs and skills gaps.

There is, therefore, a need for governments and agencies to invest in training to empower farmers - especially the next generation, who are not necessarily seeing hill farming as an attractive career choice.

This sparked debate in the panel session at the symposium, where I joined other speakers to discuss

future policies and the need for appropriate incentives and regulations.

Sheep and cattle, when managed carefully, are not just food producers but upland habitat managers and biodiversity enablers.

The challenge is to ensure their contribution is properly understood, valued and supported within agricultural policy frameworks.

Progress is being made but significant gaps remain.

One of the most pressing is how to quantify and reward the ecosystem services delivered by upland farming.

Without robust data, hill farmers and crofters cannot

be properly compensated for the public goods they provide.

By linking science with practice and highlighting the shared experiences of Scottish and Irish hill farmers, I hope I left the audience with a clear sense that hill farming has a future. But only if it embraces change and secures the recognition it deserves as a cornerstone of resilient, sustainable upland landscapes.

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