

# Teagasc Athenry sheep open day

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**T**he open day, which takes place in Athenry on June 18 at 10am, offers you an opportunity to review the latest research and technical advice from the Teagasc sheep programme and its practical application at farm level.

There will be a mix of technical presentations and interactive workshops dealing with all the main areas important to sheep production.

The open day is free to attend and all sheep farmers and those involved in the sector are welcome.

Areas that will be covered on the main technical stands include:

- Sustainable systems.
- Breeding.
- Health.
- Hill sheep.

There will also be an opportunity to review the wider research programme and meet with researchers, students and technical staff who will present more detail on the individual projects ongoing in Athenry.

Here, we profile a small selection of projects being undertaken by Teagasc Walsh scholars as part of their PhD studies, which will be presented on the day.

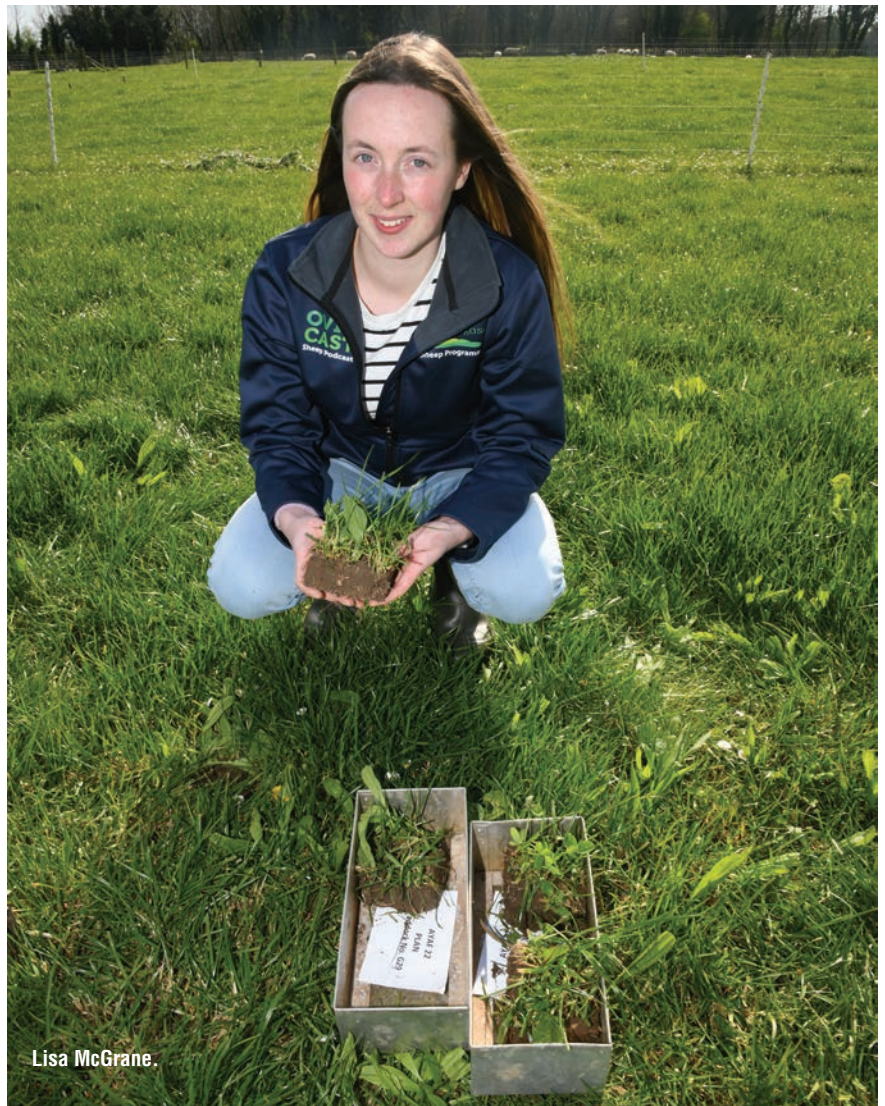
## Lisa McGrane

Lisa's project is investigating the addition of companion forages (white clover, red clover, plantain or chicory) to perennial ryegrass swards.

Clovers have the ability to supply nitrogen to the sward through biological nitrogen fixation, while deep rooting herbs such as plantain and chicory are particularly beneficial during drought conditions.

Results over a four year period show improved animal and sward performance when ewes and lambs graze these binary sward types, compared to a perennial ryegrass monoculture.

Plot studies are also underway to investigate management factors such as establishment method, post-graz-



Lisa McGrane.

ing sward height, seeding rate and perennial ryegrass ploidy on forage establishment and forage persistency over time.

The aim of this project is to investigate the suitability of these swards in intensive sheep grazing systems and determine the most appropriate management advice to maximise herbage production and plant persistency.

## Sarah Woodmartin

Sarah's project aims to identify the relationship between dry matter intake and digestibility when sheep are consuming companion forages

alongside perennial ryegrass. Animals graze perennial ryegrass and one companion forage, namely white clover, red clover, chicory or plantain.

The research is investigating the effect of these sward types on methane output, rumen function, carcass production and meat quality from lambs in the post-weaning period.

Results to-date suggest that consumption of perennial ryegrass plus a companion forage increased dry matter intake while reducing methane yield.

Future work will investigate the effect of these forages on meat qual-



Sarah Woodmartin.



Edel O'Connor.

ity and rumen function. The aim of this project is to identify the reasons behind the improvements that are being seen in animal performance when these forages are included in the diet and to validate their suitability as a feedstuff in sheep production systems.

### Edel O'Connor

Edel's project looks at measuring methane output from sheep. We have never measured methane output from Irish sheep before, so we need to establish baseline values for Irish systems. We measure methane using Portable accumulation chambers (PAC).

The sheep are placed in the chamber for 50 minutes, with methane, oxygen and carbon dioxide measurements taken at three time points. The PACs are mounted on a trailer, which allows us to take methane measurements on commercial farms across the country, with nearly 2,500 animals measured to-date.

The PACs will allow us to identify high and low methane-emitting sheep in the flock. Ultimately, our aim is to breed sheep for reduced methane emissions, which will reduce the carbon footprint of Irish sheep production without compromising animal performance.

### Mark Dolan

Approximately 50% of the national

ewe flock are mountain and mountain cross type ewes. This results in approximately 300,000 male Scottish Blackface lambs being sold as stores each year to lamb finishers after weaning.

The objective of the study is to examine the performance of hill-bred lambs offered forage rape, hybrid brassica, kale, perennial ryegrass re-seed, permanent pasture and ad-lib concentrates indoors.

The impact of these finishing systems on rumen function, greenhouse gas emissions, meat quality and the



Mark Dolan.

economic returns of finishing hill lambs in different systems is being assessed.

The findings from the study will lead to guidelines and targets for use by the sheep industry in future when using forage crops to finish lambs.

### Workshops at the open day

A series of workshops and demonstrations will deal with topical issues relating to each of the main areas;

#### Grass and forage

- Clover incorporation and grassland management to maximise growth.
- Fertiliser and silage budgets and costs.

#### Breeding

- Value of commercial recording.
- How to use the breeding indexes.

#### Health

- How to reduce anthelmintic resistance development on your farm.
- Understanding the role of faecal egg counts and how to incorporate them into management plans.

#### Production systems.

- Lamb finishing options.
- Meet with sheep BETTER farm participants and hear how they have put research into practice on their farms.

Teagasc would like to acknowledge the support of FBD for this event.